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RICHARD P. ROTHWELL, C.E., M.E., } Editors.
ROSSITER W. RAYMOND, Ph.D., }
WILLIAM H. WAHL, Ph.D., Department of Progress in Science and the Arts.

NOTE.—Communications relative to the editorial management should be addressed to RICHARD P. ROTHWELL, P.O. Box 4404, New York.

Communications for Mr. RAYMOND should be addressed to ROSSITER W. RAYMOND, P.O. Box 1465, New York. Articles written by Mr. RAYMOND will be signed thus *.

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AMERICAN INSTITUTE OF MINING ENGINEERS.

The next general meeting of the Institute will be held in Montreal, Canada, beginning Tuesday, September 16th.

A subsequent notice will give information concerning papers, excursions, railroad fares, etc. Members expecting to read papers at this meeting will please notify the Secretary promptly.

THOMAS M. DROWN, Secretary.

SECRETARY'S OFFICE, LAFAYETTE COLLEGE, }
EASTON, PA., August 11, 1879. }

INDEX TO VOLUME XXVII.

Our subscribers will receive, with this number of the ENGINEERING AND MINING JOURNAL, the INDEX to Volume XXVII. As will at once be seen, it has expanded very much beyond the limits of those hitherto issued. This is partly due to the great mass of valuable and interesting matter contained in the general articles, the correspondence, the editorials, and the department of Progress in Science and the Arts; but especially to the steady and rapid growth of a healthy interest in mining affairs, accompanied by a habit, somehow acquired by the public, of looking to our pages not only for full and trustworthy information, but also for honest estimates and impartial criticism. As the matter has been abundant and worthy of record, it seemed fitting that the reader should know where to find it; and accordingly, we have spared neither pains nor money in rendering him assistance.

THE BINGHAM GOLD MINES OF UTAH.

The London *Mining Journal* of the 16th inst. says: "It is indicated that the Bingham gold mines are about to be offered on the French and Belgian markets in connection with the Banque Européenne;" and it is inferred that the same parties who placed the Old Telegraph are moving in the matter. Some of the Bingham gold mines may become productive property; but they will never be long-lived, and if placed, as no doubt they would be, at enormous figures, as was the Old Telegraph, they will prove—as that mine is now proving—disastrous investments. The French and Belgian investors had better look more closely into the merits of the property than they did in the Old Telegraph case, and not trust to such wild and exaggerated reports as were issued then. We published, in the ENGINEERING AND MINING JOURNAL of July 26th, 1879, pages 49 and 50, a brief description of the Bingham gold deposits.

WATER-GAS VICTORIOUS.

We note the following paragraph in the Yonkers *Statesman* of the 28th instant:

"The Board of Directors of the Yonkers Gas-Light Company, after a thorough investigation extending through several months, of the merits of water-gas, have unanimously resolved to adopt that system. Its superiority over coal-gas is so apparent that it must soon supersede it altogether.

"They have made an arrangement with the Yonkers Fuel-Gas Company to have the benefit of the Strong process, of which the latter company is the proprietor for this city, and expect to be able to supply the new gas by the middle of November next."

As we predicted a few weeks ago, the superior quality and economy of water-gas is at last forcing recognition from the old coal-gas companies, and we expect to see them going over, now they can no longer "squelch" it. Yonkers has fallen into line with Scranton, Pa.; Toronto, Ont.; Baltimore, Phœnixville, Harrisburg, and many other places. Elsewhere in our columns will be found the triumphs of water-gas over Siemens gas for heating purposes as shown by the Swedish experiments.

ANTHRACITE COAL TONNAGE.

The following, furnished by Mr. JOHN H. JONES, is a statement of the anthracite coal tonnage for the first seven months and the month of July, 1879, compared with the same periods last year:

	July, 1879.	July, 1878.	Increase.	For year 1879.	For year 1878.	Increase.
Philadelphia & Read. RR.	696,451	399,191	297,260	4,097,476	2,441,941	1,655,534
Lehigh Valley RR.	397,082	340,781	56,301	2,411,922	1,797,724	614,199
Cent. RR. of N. J.	316,480	239,751	76,729	2,085,146	1,135,923	949,223
Del., Lack. & W. RR.	345,965	211,468	134,497	2,048,865	1,101,290	947,575
Del. & Hud. Canal Co.	305,054	191,654	113,399	1,642,335	1,061,798	580,537
Pennsylvania RR.	157,280	124,559	32,721	928,003	688,171	239,832
Pennsylvania Coal Co.	140,044	85,029	55,015	818,281	502,337	315,944
N. Y., L. E. & W. RR.	45,537	26,497	19,041	259,852	138,993	120,859
Total	2,403,893	1,618,930	784,963	14,291,880	8,868,177	5,423,703

The production for the month of July this year shows the very large amount of 2,403,894 tons, or about 50 per cent more than for the same month last year. A comparison of the proportions mined by each company during last month, and the percentage of allotment under the combination of 1878, is as follows:

	Percentage of allotment in 1878.	Percentage of production, July, 1879.
Philadelphia & Reading RR.	28·625	29·0
Lehigh Valley RR.	19·750	16·5
Central RR. of N. J.	12·905	13·2
Delaware, Lackawanna & Western RR.	12·750	14·4
Pennsylvania RR.	7·625	6·5
Delaware & Hudson Canal	12·480	12·7
Pennsylvania Coal Co.	5·865	5·8
N. Y., L. E. & W. RR.		1·9
	100·000	100·0

The production for the first seven months of this year amounted to 14,291,881 tons, as compared with 8,868,178 tons for the corresponding period of 1878, showing an increase this year of 5,423,703 tons, or over 60 per cent.

The following is a comparison of the proportions mined this year, and the percentage of allotment:

	Percentage of allotment in 1878.	Percentage of production, seven months, 1879.
Philadelphia & Reading RR.	28·625	28·7
Lehigh Valley RR.	19·750	16·9
Central RR. of N. J.	12·905	14·6
Delaware, Lackawanna & Western RR.	12·750	14·3
Pennsylvania RR.	7·625	6·5
Delaware & Hudson Canal	12·480	11·5
Pennsylvania Coal Co.	5·865	5·7
N. Y., L. E. & W. RR.		1·8
	100·000	100·0

From the above comparisons of production for the month of July and the first seven months of this year, with the percentage of allotment used by the combination last year, it is very likely that considerable confusion would occur were an effort made to enter into a new compact upon the basis of allotted percentages of production. The Philadelphia & Reading Railroad Company has held its own, while the Lehigh Valley Railroad, the Pennsylvania Railroad, and the Delaware & Hudson Canal Company show marked losses, and the Central Railroad of New Jersey and the Delaware, Lackawanna & Western Railroad show marked gains. This year, the race has been a "go-as-you-please" one, and stands strongly against the Lehigh

Valley Railroad Company, which has heretofore obstinately opposed combinations that did not increase its proportion of business, instead of decreasing it, as an arrangement based on this year's business would do.

The production of 14,291,881 tons up to July 31st represents a yearly output of about 24,500,000 tons, instead of 22,000,000 to 23,000,000 tons as it was thought early in the year would be the utmost that the companies could do under the the condition of their mines and the scarcity of labor at that time. The country will not take so large a quantity, so a curtailment of production must take place, else even more ruinous prices than now prevail will be seen. The stock of coal on hand at tide-water shipping points, July 31st, 1879, was 503,791 tons; on June 30th, 432,167 tons; increase, 71,624 tons.

THE FUEL OF THE FUTURE.

We have many times expressed in these columns the conviction that the time was near at hand when water-gas (hydrogen and carbonic oxide) would come into general use, replacing coal for domestic purposes, in cities at least, and in many metallurgical operations. It has also seemed probable that, enriched, it would supplant the coal-gas now in general use for illuminating purposes, though, as the time seems approaching when electric lighting will be so perfected as to supplant gas, it has always appeared to us that the question of fuel-gas was a far more important one than that of illuminating-gas. Many of our predictions concerning water-gas have already been verified. It has been fully proven that enriched water-gas is a cheaper and much better illuminant than coal-gas, and that it is, in no respect, more dangerous, the carbonic oxide bugaboo having been abandoned even by the fossilized heads of the coal-gas monopoly.

It is greatly to be regretted that our metallurgists and engineers have not fully appreciated the industrial importance of the water-gas processes, so often illustrated, described, and commended in these columns, but have allowed the Swedish engineers to make the first substantial progress in their adoption. No less an authority than the great German physicist, Rudolph Wagner, has designated this new method of making water-gas "an epoch-making invention."

We announced, some months ago, that Mr. George S. Dwight had gone to Sweden, on the invitation of the Swedish Iron-Masters' Association, to erect experimental works for the manufacture of water-gas by the "Strong process." These works afforded opportunity for making the most thorough tests of the relative values of water-gas, Siemens gas, and illuminating coal-gas, and of the adaptability of water-gas in many of the operations of iron manufacture. We shall, before long, give a full account of these experiments, which have induced eminent Swedish metallurgists to predict a revolution in the Swedish iron industry from the advantages this system brings them. Large permanent works are now being erected in Sweden, and preparations are making for its adoption in Russia and Germany.

The following figures of relative calorific values, which have been arrived at by Mr. Särnström, from the experiments referred to, are very instructive and suggestive:

100·00 cubic feet of Siemens gas from coke equals in calorific value
64·30 " " " " " peat; or
59·80 " " " " " Höganäs coal; or
39·18 " " Strong water-gas; or
17·75 " " coal-gas (illuminating).

Or, in Swedish calories (= heat required to raise 1 lb. Swedish or ·93 lb. English, of water 1° Celsius, 100 cubic feet of each gas yielded):

Coal-gas (illuminating)	34,453 calories.
Strong gas	17,418 "
Siemens gas (from coke)	5,500 "

From which we may make the following comparison:

The calories in the gaseous product obtained from one ton (2240 lbs.) of coal, by the different systems, are as follows:

10,000 cubic feet illuminating coal-gas × 34,453 = 3,445,300 calories.
56,000 " Strong gas × 17,418 = 9,754,080 "
123,468 " Siemens gas × 5,500 = 6,790,740 "

Of course, the coke residual of the first is excluded from this comparison.

The chief economy in the use of water-gas is not so much in its greater calorific equivalent, however marked that may be, as in the greater calorific intensity of its flame, and in the fact that a larger proportion of its combustible elements is actually utilized. Experiments have shown, as might be expected, that the nitrogen in Siemens gas not only carries off heat, but that it acts as a positive preventive of combustion, neutralizing, as it were, a certain amount of combustible elements. Thus, it was found, by frequent experiment, that from 14 to 16 per cent of the products of combustion of Siemens gas was still carbonic oxide.

No doubt the larger proportion of carbonic acid in Siemens gas also contributes to this enormous waste. It was quite evident in the tests made that the very high flame temperature of water-gas, as well as its more perfect combustion, gave it an immense practical economy over Siemens gas—an advantage which does not appear in a comparison of the calorific equivalents. These are questions which have not received the attention they deserve, though we long ago pointed them out as elements of great economic importance.

NEW PUBLICATIONS.

Foundations and Foundation Walls, *for All Classes of Buildings, Pile Driving, Building Stones and Bricks, Pier and Wall Construction, Mortars, Limes, Cements, Concretes, Stuccoes, etc. Sixty Illustrations. Practical Explanations of the Various Methods of Building Foundation Walls for all Kinds of Buildings. Tables of the Weights of Materials, etc. The Kind of Materials Used, the Loads Sustained, and the Sizes of Wall Piers, etc. Use of Piles in Foundations, with Terms, etc. Plastering, Mortars, Limes, and Cements. Extracts from New York Building Laws, with Notes.* By George T. Powell, *Architect and Civil Engineer. To Which is added, a Treatise on Foundations, with Practical Illustrations of the Method of Isolated Piers, as Followed in Chicago,* By Frederick Baumann, *Architect, Revised by* G. T. Powell. New York: Bicknell & Comstock. 1879. 8vo, 119 pp. (Pretty full table of contents, but no index.)

It will at once occur to the reader that a book, treating, in the space of a little over 100 pages, all the topics enumerated in this ambitious title-page, can not go very thoroughly into any of them. Indeed, after subtracting the 20 pages of Mr. Baumann's essay, 10 pages occupied with the text of New York City ordinances, 10 pages as the aggregate of the spaces left blank or given up to title, contents, and preface, and 12 pages for the aggregate area of illustrations, we have 66 pages for Mr. Powell's text, which is, moreover, set in large type and leaded. In this limited space, the author has apparently given, without attempt at arrangement or discussion, a series of extracts from his note-book and scrap-book, interspersed with tables and rules approved by good authority or found safe and useful in practice, together with some things, by way of scientific completeness, which he would have done better to omit. The book seems likely to be very convenient to builders, and to laymen in general, who occasionally employ builders, and would like to know what they are about. But it can not be ranked as a thorough technical treatise on any part of its multitudinous subject. It is essentially a collection of recipes; and while any one of these might prove, under certain circumstances, worth the whole cost of the book, all of them together do not constitute an explanation of principles. There are many books of this sort; and we do not wish to discourage their publication, since they are often the means of bringing to notice empirical rules and customs in the arts which more scientific works overlook. But we feel that a writer who is an "architect and civil engineer" ought to do better work than this in book-making. If his practical duties have given him little leisure for composition, he should accept competent literary revision; and if he thinks it necessary to include in his publication matter of the subject of which he is ignorant, he should either submit it first to an expert, or, if he adopts it bodily out of some other book, be sure of the trustworthy character of that other book. These obvious cautions Mr. Powell has not observed; and the result is, that his English is illiterate, and his science (apart from his own profession) any thing but creditable. For the former defect, we blame the publishers, even more than the author. Many worthy and well-informed gentlemen—sometimes, even, distinguished authors—write carelessly. Editors and publishers know very well that few authors are competent to prepare manuscript for publication or to read their own proofs without aid. It is the publisher's duty and interest to see to it that the works which bear the imprint of his house shall not disgrace it by slovenly proof-reading or ungrammatical style. We have known a leading New York house to suppress an entire edition for mere faults in punctuation, not sufficient to destroy the sense, but offensive to taste. The publishers of the book before us will, we trust, not feel that we single them out for over-severe comment. We mean to censure, wherever we find it, the practice of printing books, particularly technical books, without competent revision; because we feel that such censure is the only means of curing the serious evil which affects much technical literature. If the proof-reader has not noticed glaring grammatical faults, how can we be sure that he has eliminated all statistical or substantial errors?

We give a few specimens at random, to illustrate our strictures. The following belong to the class which the proof-reader should have corrected:

"This strata may be made secure by drilling, etc." (p. 9).
"One of these is the Limnoria Terebrans, and are about three-sixteenths of an inch long" (p. 17).
"It [gneiss] is a metamorphic rock, and lays northwest" (p. 27).
"Quartz is oxide of silicum" (p. 30).
"Schists are stratified; the strata generally lays flat" (p. 31).
"Calcite or carbonate of lime are transparent crystals when pure, but changes color with impurities" (p. 32).
"The walls of chimneys when built of six inches thick * * * is nearly as safe," etc. (p. 43).
"The batter of chimneys are reduced at top," etc. (p. 44).
"Trapezium [Rule for calculating area] Diagonal by one-half sum of perpendicular circle" (p. 58. The word "circle" belongs elsewhere, and part of the rule is probably omitted).
"Sesque-oxide of iron" (p. 73).
"Guage-stuff" (pp. 77, 78).

The following we may perhaps charge wholly to Mr. Powell's account:

"Granite * * * is the most granular of all rocks. * * * Marble is the purest form of carbonate of lime (except stalactites) and is an earlier formation of limestone, with a pressure which retained the carbonic acid" (p. 31).
"Serpentine is a greenish melted rock," etc. (p. 32).
"Hydraulic lime is any combination of lime with very silicous clay" (p. 33).

What sort of "revision" Mr. Powell has made of Mr. Baumann's paper, we can not say; but we presume that the latter is a German, and that

Mr. POWELL has corrected his English. There are many foreign turns of expression in it still; but it is a vigorous and valuable treatise, in which a principle not altogether new—that of isolated foundation piers—is advanced in a manner and a degree which lend it both novelty and importance. Mr. POWELL's own account of foundations does not mention this principle, and one of his illustrations (p. 37) is curiously contradictory, at first glance, with one of Mr. BAUMANN's (p. 107). Nor are we certain that the difference does not go deeper; but the question is not worth pursuing. *

EIGHTH, NINTH, AND TENTH ANNUAL REPORTS OF THE GEOLOGICAL SURVEY OF INDIANA, *made during the years* 1876-77-78, *by* E. T. COX, *State Geologist, assisted by* PROF. JOHN COLLETT *and* DR. G. M. LEVETTE. Indianapolis, 1879. 8vo, 541 pp. (Analytical Index.)

The State of Indiana presents (with one striking exception) no sensational problems or phenomena in geology. Not a break has been found in the peaceful uniformity of its stratified rocks, and indeed the rocks themselves are buried out of sight, through a large portion of the State, by the vast deposits of glacial drift. But the reader of Professor COX's reports will find that the meager and monotonous materials at his disposal are capable of furnishing to an intelligent student not only the elements of important industrial conclusions, but also the bases of generalizations connected with many living questions in dynamic and historical geology. The present volume contains, besides detailed reports on Wayne, Harrison, and Crawford counties, an interesting review of the general geology of the State, and special reports on its building-stone, cements, and clays. The appearance of a single volume of such moderate size after an interval of several years, indicates that the appropriations of money by the Indiana Legislature for the prosecution of the geological survey have been small. We hope that the disappearance of "hard times" will encourage Western statesmen to support more liberally the agencies which are so intimately connected with the stable prosperity of their commonwealths. There is no pretext for denunciation of the Indiana survey, even on the part of the most hearty rural despiser of theoretic science. Professor COX has been distinguished from the beginning for the enthusiastic zeal with which he has pushed all inquiries and collected all facts bearing upon economical questions. He could not have been more active for Indiana if he had been Commissioner of Immigration or Agent for Block Coal, instead of State Geologist. His annual reports have been full of "practical" matter; and he has put on no "airs" in the way of costly volumes and plates in honor of mere science. We do not say that a trifle more of "style" would not have been agreeable to us and creditable to Indiana. It is not the highest compliment that can be paid a wealthy and enterprising State to say that her geological reports are prepared with scanty means and printed in as cheap a style as modern civilization will permit. All that we mean to suggest is, that when, in spite of these restrictions, hard-working and self-sacrificing public servants produce official reports which both "attract capital," guide and stimulate industry, and command the respect of scientific men, even the "country member" ought to cease from carping criticism, look with toleration upon the Latin names of fossils here and there, and perchance resolve to vote for the continuance in office of men who know so much and "can be had so reasonable."

The report before us contains, as we have said, an interesting review of the general geology of Indiana. Prof. COX has been led to reject the hypothesis, so long entertained by geologists, of a local disturbance, along the so-called "Cincinnati axis," by which the Lower Silurian rocks were brought to the surface in a certain area comprising parts of Indiana, Ohio, Kentucky, and Tennessee. He regards this area, surrounded as it is by the successive outcrops of more recent formations, as the effect of a prolonged continental elevation. In other words, the Lower Silurian rocks have not been pushed up through superincumbent strata, or laid bare by the erosion of a local anticlinal; but the Lower Silurian ocean-bed, slowly elevated, became exposed as dry land in its shallowest part first; and, as the elevation was continued, zone after zone of dry land emerged, each bearing the later formation deposited upon it by the receding waters. The hypothesis is simple, and Prof. COX explains and supports it lucidly and forcibly.

The portions of this volume possessing the greatest interest for the general reader are probably the chapters on archæology (mounds and mound-builders) and on caverns. The description and map of Wyandotte Cave, in Crawford County, furnished by Prof. COLLETT, would make a good magazine article; and portions of the text, indeed, read as if they had been prepared for such a purpose, rather than for the pages of a scientific report. But science is not neglected, as the excellent discussion of cave-life, including Prof. COPE'S Observations on the Fauna of Wyandotte Cave, sufficiently proves.

The mounds of Indiana have been treated at some length in the previous reports of Prof. COX, particularly by his indefatigable assistant, Prof. COLLETT. In the present volume, a considerable number of them are accurately mapped and described; but little attempt is made to theorize upon their age and origin, or even their use. An interesting address on Archæology is reprinted, which was delivered by Professor COX, in 1877, before the State Archæological Society. It shows him to be extremely cautious in expressing any positive views on these disputed points, though he is plainly of opinion that mounds in which human bones are found were the burial-places of distinguished persons, and that the presence of charcoal and ashes does not indicate that cremation was practiced. Moreover, with regard to certain other mounds, he appears inclined to reject the ingenious suggestion advanced in 1876 by MORGAN, that they were the foundations upon which dwellings were constructed. From some passages, we infer that Prof. COX ascribes a high antiquity to the mound-builders as a race. While this may be true, it is, we think, also well established that the practice of mound-building did not become extinct until after the entrance of the whites into the Mississippi Valley. But archæologists may be able to distinguish between the most ancient and the more recent mounds, though distinctions of that kind, based on the implements and other objects exhumed, are not perfectly trustworthy, since even the characteristic relics are proved, in some cases, to have survived in actual use among tribes of our own day. American archæology is destined to modify essentially the current views of that science. Indeed, the publications and collections of the Smithsonian Institution have already produced a profound effect in that direction. The report before us contributes valuable material to this important study.

Prof. COX returns in this report to a favorite theme—the manufacture of Bessemer iron in Indiana from block coal and Lake Superior ore. His estimate of cost is as follows, for one ton of pig:

1½ tons ore, cost at Escanaba	$7.50
Freight to furnace	2.05
4250 pounds raw coal	1.91
650 " coke	1.33
1200 " limestone	45
Labor (about)	1.25
Repairs and incidentals	25
	$14.74

Size of furnace, 18′×60′; three Whitwell ovens. Total cost of furnace, $60,000; of coal property (99-year lease on 240 acres at 10 cents royalty), $6000; of coking ovens, $2000. Product, 1600 tons per month. The labor item in the above estimate strikes us as too low, even for the hard times; and as these are now passing away, labor would doubtless cost more than $1.25, probably $2.50 per ton of iron. But there is no doubt that fuel at 90 cents per ton, including royalty, is a great advantage possessed by Indiana furnaces. *

PERSONALS.

Prof. J. S. NEWBERRY, who has spent the summer visiting mines in the West, is now in Colorado, and is expected shortly to return East.

The illustration of the Bodie Bonanza will appear in our issue of next Saturday. It was unavoidably omitted this week.

The dates for the opening of the Massachusetts Institute of Technology, and for the fall entrance examination, are given elsewhere in this number.

"Col." H. G. BIXBY, best known in the East as the gentleman who donated a lot of Isabella mine stock to the Methodist University of East Tennessee, and was instrumental in placing a lot of that worthless stock at high figures among the faithful here in the East, it appears is turning his attention to Bodie. The Bodie *News*, which "is glad to know he has amassed a fortune"—we suppose in "Isabella" enterprises—says that Mr. BIXBY "is well pleased" with the Booker mine, "in which he is a heavy owner." Is the *News* man so simple as to suppose the "Col." would say the Booker, "in which he is a heavy owner," does not amount to much? It is to be hoped the next thing the "Col." brings East may have less of the "feline" about it than the last.

LEVIATHAN.—We have had a great number of inquiries concerning "Leviathan," a Comstock stock, which has received a vast amount of puffing and advertising by one of our New York contemporaries. The Leviathan is a property of even less value than the vast number of other Comstock "assessment propositions." Judging from the superintendent's reports, extending over the past two years, since September, 1877, we find about this record: Pushing incline on either north or south drift vigorously, or north or south drift running along foot-wall; clay and quartz stringers coming in; sometimes increasing; low-grade assays; the highest assays mentioned are $12 per ton; black dike in face; 16 inches low-grade in face; and a lot of similar clap-trap. One well-informed correspondent says: "The San Francisco stock-brokers all concur in the opinion that the stock is not worth a dime, and would treat the man who would take it off their hands—but would keep out of his way afterward." Another says: "The more I hear, read, and see of it (the Leviathan), the more am I convinced that it is a genuine cat, and not even a domestic house-cat, but the common wild feline of the Sierras." Our Western exchanges have also vigorous protests against the "ridiculous blunders," "absurd correspondence," and "bare-faced puffs of known wild-cat enterprises," which have characterized the paper which has so persistently recommended investment here in the East in Leviathan, Maryland Consolidated, and other scarcely more reputable concerns.

NEVADA AND OTHER NOTES.

Special Correspondence of the Engineering and Mining Journal.

THE MAMMOTH MINE.

The Mammoth mine, of Lake District, Cal., is now running 20 stamps. The increase to 40 stamps will soon be made. The work at the end of July stood as follows: First or upper tunnel is in 157 feet; no work done there at present. Second tunnel is in 500 feet; from it the present ore is taken; it is 250 feet below the first tunnel. Third tunnel is in 160 feet; expect to reach ledge in 200 feet more. Fourth tunnel is in 560 feet; will probably cut ledge in 250 feet more. A fifth tunnel is proposed, and estimated to cut ledge 1800 feet below croppings, with a length of 2000 feet. A pulp assay of forty-four tons averaged $53; but the average of their ore is less than half this. There is one very rich streak of ore, about 50 feet long, cuts across the ledge on this level. The management of this mine is conducted on the secret plan, and its stock is, therefore, to be avoided. We have very reliable information that the ore, except in the rich chimney, is very low-grade.

From Bodie District, the Bulwer reports very fine ore in the winze on the Ralston vein, where the vein shows a width of 3 feet, at a depth of 18 feet in the winze. The south drift on the 380 level is in 145 feet, and shows 2½ feet of ledge. The Bulwer mill, which I think is to be built in conjunction with the Standard, will be running in about 90 days. By this time, also, the Noonday and North Noonday joint mill will be in operation. These mills will have 30 stamps each. The usual good accounts come from Standard. The latter's bullion product for July was $104,020.96. Mono reports an improvement—a cutting of the Bodie continued bonanza, with a cross-cut from the joint drift. We have heard such things before, but as yet take no stock in it. The stock responded fairly to the rumor.

Bodie produced only $62,578.67 up to July 30th, inclusive, while Noonday shipped $4000 crude bullion in July. The July total for the camp is $170,599.63, part silver, part gold. The silver is counted on the usual assay basis of $1·2929 per ounce fine.

As a general thing, Bodie District verifies, by its bullion shipments, the frequently-heard remark, that it is looming up. The district shipped, from January 1st, 1879, to August 1st, 1879, $1,349,548.70; while during the same period last year, it shipped only $609,015.35; showing an increase of $740,533.35 for this year in seven months.

The bars of Standard's last month's bullion were all over $20,000 apiece, varying, for the most, $568 between single bars; while Bodie's bars varied all the way from $8600 to $12,800. As I intimated three weeks ago, Bodie has declared 50c. dividend, and I see parties are shorting her even now at $10.50 per share. There seems to be some game going on in that mine.

The Noonday Company, since it started crushing last April, first in the Syndicate, then in the Miners' mill, has produced, up to August 14th, eight bars of bullion of the following values: $12,981.46, $4768.58, $4070.59, $5050.68, $1308.04, $4000 crude bullion, $2000 crude, and $1911.32, making a total of $35,890.67. The average yield of the ore has been $33 per ton. The milling capacity of the camp is at present 54 stamps, of which Standard has 20; Syndicate, 20; Bodie, 10; Miners' mill, 4. With the Noonday joint and Bulwer mills under construction, the camp will soon have 114 stamps, and their bullion product will be greatly increased, especially by the Bulwer mill, which will have high-grade ore to run on.

Twenty-two of the better-known Bodie mines and mills employ in all 983 men. The Standard mine and mill claim 278 of these; the Noonday, 60; and Bulwer has 25 men working, at $4 per day, which is certainly a light expense, considering the good reports from the mine.

South Bodie mine had its annual meeting, but the superintendent reports nothing but dead-work.

Eureka reports, on the 15th, the water cleared from the 13th level, and ready for the 14th water. The strike is not yet settled between the coal-burners, as you know as well as I, by the associated press dispatches. I think this strike will be used as a pretext for a lot of dead-work.

Paradise mill, in district of same name, and intended for the Paradise mine, will, so report says, not be ready until September 1st. Dates have twice been changed; stock quotation has improved some few cents since assessment was delinquent. It is controlled by the Grayson and Gashwiler crowd, and Greenwell, of Rye Patch repute, is one of the directors of the company—a management that ought to frighten away any honest investors.

The Sedan 5-stamp mill, of Paradise, has hung up its stamps, because it can't get ore to run them.

Tuscarora stocks show inactivity and lower prices. The controlling parties generally give a lull before a storm. Your readers know these stocks are all manipulated. Belle Isle reports, respectively, 2½ feet and 18 inches of ore in its north and south drifts; north cross-cut, on 150 level, cut 8 inches sulphuret ore.

By a mistake, I assigned the Independence annual meeting to next month. It was held on the 18th, and the old board elected, namely: G. W. Grayson, J. L. Brown, Thomas Cole, Nat. Stein, and Clinton Gurnee. The Secretary shows: Received from bullion, $381,105.29, and dividends declared, $125,000, with cash on hand, $37,339.64. The cash on hand at the last annual meeting was $52,735.24, and drafts outstanding $5263.75, and bills payable $3094.50. They further received $25.50 as subscription. As such, their total receipts are $439,129.48. Subtracting $125,000 dividend, $37,339.64 cash in hand, and bills payable last meeting, $3094.50, a total of $165,434.14, leaves, as expenses, $273,695.34, or over 62 per cent of the receipts. The superintendent reports the value of the ore milled last year at $61 per ton, and a large amount of ore in place above the 175-foot level, and says that below but little prospecting has been done.

From the Comstock, we have very little valuable news. Mr. Patton, the superintendent of Ophir, expresses, in his letter of the 16th, "reasonable hopes of soon developing a valuable ore-body in that mine." I should think, to judge from the bullion product I have given you of that mine, that a "four-bit" dividend ought to be declared. To many it must seem strange that, if that "valuable ore-body" is there (and if so, insiders know it), not speaking of the bullion produced, Mexican should be quoted nearly at an even figure with Ophir. Mexican, as yet, lives only on the hopes of its neighbors, and in dreamland on its 2000 west cross-cut. Whether Mexican and Ophir are worth the price they are quoted at, parties can see for themselves, by counting the many dollars stockholders have received from Ophir's last seven-months' bullion shipments. About Union, Mr. Patton writes, under same date, no doubt inspired by "Colonel Jim," that the horizontal drill-hole from the Sierra Nevada incline winze at their 2300 station, corresponding with Union 2400 level, was started on a course south 2½° west. After completing 80 feet, the drill-rod broke and a new hole was started on the same course, with a dip of one in ten feet. This had penetrated 95 feet at the time of writing, and he says that both holes showed, so far, ore giving "fair assays." The statement of "fair assays" is very vague and unsatisfactory, and I can not see why the colonel does not prompt the dollars and cents. I don't think they were short a long bit for telegraphing expenses; but I presume there is a better gamble in the word "fair." On Monday, the 11th, Colonel Fair was in San Francisco, no doubt heavily laden with little boxes holding the bore-slimes of the last hole. The hole was finished; the dance was over. The public knows no more. The management, I presume, thinks it knows all that is safe and good for it to know. To-day is again the lawful visiting day; but save in Ophir, no one will be admitted at the more interesting mines. Insiders probably say, "You can't see any thing of interest, any way; and what is the use to sweat for nothing?" I wonder whether the colonel felt warm when he sat with his boxes next to the drill, in the sweltering heat of the 2300 level, catching the borings, or whether he wore the heavy Cornish blanket-coat when he stood before the white-hot cupel-muffle, assaying the borings carefully collected the previous week. Mr. Fair learned assaying several years ago. I presume his philanthropic impulse at the time was, in case of necessity, to relieve the much overworked assayer in the hot days of August. Of late, the magnates seem very much concerned about the health of their brother stockholders and employés.

At Sierra Nevada, they are having a nice quantity of water to handle—just as much as they possibly can do. The cost of handling this water is 55 cords of wood a day, at $10 per cord. This quantity was burned for the last two weeks, to allow Mr. Fair to collect private information over other stockholders. Now, when he has it, he lets the mine fill up to the 2200-foot level. It costs too much to pump it. No doubt economy to stockholders is the reason why. What does the East think of such practice, to spend large amounts to give Mr. Fair and his chums a chance to obtain exclusive information over other stockholders? No doubt, this is charged to Sierra Nevada assessment account. Say 40 cords of this were spent solely for Uncle Jim to keep his boots dry, for 14 days, at $10 per cord, or say, $5600, charged to wood account of a mine, in which Uncle Jim is, if rumor be true, little interested. Then, besides engineer's wages, drill-runners' wages, etc., what do the stockholders see of it? "Fair grade assays!" But then the bonanza firm furnishes the wood and makes a large profit on it. This secret boring at the North End, and the refusal to admit stockholders or qualified experts is the most consumate arrogance these men have been guilty of for some years; and if Mr. Fair's ideas of "fair-grade ore" are as elevated as his ideas of fairness to stockholders, I fear the quotations of Union at $66 were intrinsically as big a fraud on the public as the 55-cord business is. Knowing now that it takes Sierra Nevada $550 a day for wood alone to handle the present water, or $198,000 per year, at that rate, I reckon Sutro Tunnel is still considered superfluous—wouldn't have it as a gift, eh?

The Savage mine is now only using 16 cords per day, and at last reports had the water down to 90 feet below the 2100 level, and was holding it there. The comparison between this mine and Sierra Nevada shows how much smarter and more far-sighted Mr. Sutro was than other gentlemen, provided the mine managers and superintendents were sincere in their abuse of the tunnel a few years ago.

Reports say that the original source of the water in the Savage is weakened; for the water rises only slowly, during the delay of lowering the alternate pumps. If this report be borne out by facts, it is good news for the water-stocks, and we congratulate them on their good luck. The 20th inst., Hale & Norcross pump will start up again and help the Savage tackle the waters. The Savage men have lowered the water to a deeper point than they have seen the last three years; but were it not for the Sutro Tunnel, they would be where they were a year ago.

The Alta folks will have a clean-up in the Briggs mill in from four to five days. Prick your ears for dividends. (Irish?)

Caledonia held its annual election to-day, reëlecting the old board.

Nahtaivel (come devil), *alias* Leviathan, deserves to be remembered in the nursery rhymes--

"The same old cat is living now,
Though every hair is gray," etc. etc.

CLIP.

MONTANA.

Special Correspondence of the Engineering and Mining Journal.

Both the Algonquin and Salmon mines are yielding large quantities of good ore daily. It is anticipated that 2000 tons of ore will be on the dump to start the mill with, which it is proposed to get into running order by the middle of October. The Hope Company is in bonanza again, and the mill is running regularly. The company will soon put pans, etc., in its mill and renovate it generally.

The Northwestern Company has made a bad failure, solely by ignorant and knavish management. A dry-goods clerk as manager, with demijohns plentiful in the office, would ruin the best mining company in the world.

Butte is moving along in good shape, with good ore in the 500 level of the Walkers mine; this camp will fairly rush ahead, and, I believe, will be one of the best camps in the United States within five years.

The Penobscot manages to make a stand-off, and that is all. Too many salaried men and a lack of knowledge of the business, is what ails them. Give the Penobscot in charge of George Hearst, or McMasters, of the Homestake, and she would earn big dividends.

The Rocker has "fair prospects"—of wanting more working capital soon.

PICK.

THE VICTOR TURBINE.

For effectiveness, few, if any water-motors can lay claim to as great merit as that we describe and illustrate this week, known as the *Victor Turbine.*

Some months since, the manufacturers of this wheel, the Stillwell & Bierce Manufacturing Company, of Dayton, Ohio, having for many years previously been engaged in the manufacture of water-wheels, determined to make such experiments as experience should dictate, and with such facilities as science could offer and liberal expenditure of money procure, in order to produce, if possible, a wheel which would be superior to those already in use. The results were very gratifying to themselves and to many who employ motors of this class.

The table below exhibits the results of a test of the Victor Turbine made at the Holyoke (Mass.) Testing-Flume, March 26th, 1878.

A 25-inch and a 30-inch wheel of the same description, tested at the same time and place, gave corresponding results; and altogether, it is claimed that they show the highest efficiency of any wheel of the size yet tested, considering the amount of water used.

The following is a description of the several parts:

Fig. 1 is the outer chute-case and cylinder, with the bridge-tree and wood-step, which support the wheel in position. This case is one casting, and is bored to gauge to receive the register-gate (Fig. 2) which revolves within it. To insure the wheel's sitting plumb, it has a projecting flange, faced off at a right angle with the wheel-shaft, which is to rest upon the floor of the penstock, previously made perfectly level.

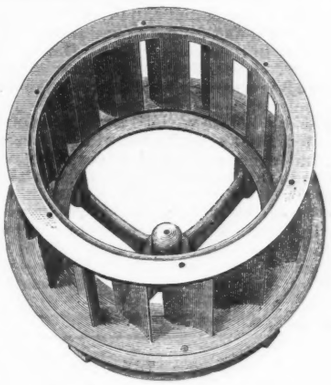

FIG. 1.—OUTER CHUTE-CASE.

Fig. 2 illustrates the inside register-gate, cast in one piece, with fixed water-ways corresponding with the chutes in the outer case; the two combined forming one duplex chute. This gate is bored to receive the wheel and turned to fit the outer case, within which it revolves. It is operated by means of a segment and pinion. By the movement of this gate, the water is admitted or shut off, and the supply to the wheel regulated; an equal and uniform delivery on all parts of the same being insured without changing the direction of the current, the relative angle of the stream at the face of the bucket, or in any degree checking the velocity of the water admitted to the wheel. It should be observed that the hub of the four-armed spider attached to this gate is bored to fit accurately upon the lower end of the pedestal which projects below the top of the wheel-case (shown in Fig. 3), forming a journal-bearing. This feature of the improvements has proved of great value, as it enables the parts to lie so very closely fitted that there can be no leakage, and yet not interfere with the free working of the wheel. It also strengthens the gate, holds it rigidly in position, reduces the friction in moving it to its minimum, and entirely obviates the objections heretofore urged against a register-gate. The advantages possessed by this simple gate—composed of one single casting—over the usual complicated arrangement to effect the purpose, are apparent.

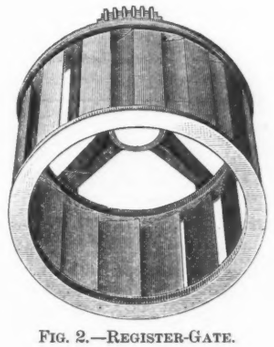

FIG. 2.—REGISTER-GATE.

FIG. 3.—TOP OF WHEEL-CASE.

15-INCH WHEEL.

Gate.	Head in feet.	Revolutions per minute.	Horse-power.	Cubic feet of water.	Percentage useful effect.
Full gate.	18·10	321·5	29·22	970·39	·880
9-10 "	18·21	343·0	26·00	882·34	·857
8/10 "	18·26	334·0	25·30	887·26	·826
7/10 "	18·28	308·0	24·26	890·55	·790
1/2 "	18·65	321·0	13·61	607·90	·635

Fig. 3 represents the roof of the wheel-case with the pedestal attached through which the wheel-shaft passes, forming a journal-bearing for the same. This top is also of a single casting of great strength. It projects over the register-gate all around, and is fastened by set-screws to the outer chute-case. Its rigidity and shape protect the gate entirely from vertical pressure of the column of water, rendering its movements very easy, while its whole arrangement facilitates the erection of the wheels, and gives easy access to them in case of accident, as, by simply removing the set-screws, the top becomes detached.

The pinion and segment by which the gate is operated are completely housed, and thus protected from breakage by foreign substances getting between the teeth, as is more fully shown in Fig. 5—a feature which constitutes one of the patented improvements.

Fig. 4 shows the wheel on its shaft removed from the chute-case. This wheel is radically different from any other we have examined, and presents some very novel features. It receives the water upon the outside, and discharges it downward and outward; the lines of discharge occupying the entire diameter of the lower portion of the wheel, excepting the space occupied by the lower end of the shaft.

Fig. 5 illustrates the Victor Turbine in complete readiness for setting in the flume. In the construction of the Victor Turbine, the various parts of a portable wheel and case have been reduced to the smallest possible number compatible with the greatest efficiency, and particular attention paid to an exact duplication of the several parts.

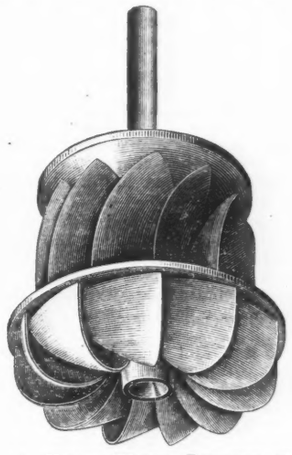

FIG. 4.—VICTOR WHEEL REMOVED FROM ITS CASE.

The wheel is specially adapted for use in localities difficult of access, in consequence of its being easily transported by pack mules; but in aiming at the desirable quality of lightness, the designers have in no way sacrificed simplicity, accessibility, strength, or durability in any of its parts.

As an illustration of its compactness and power, we may state that, some weeks since, at the factory, we were shown an 8-inch wheel which a man could easily carry in one hand, grasping it by its shaft, which developed 10 horse-power under a head of but 21 feet. This wheel was later shipped to a point in Massachusetts, where it drives a small mill.

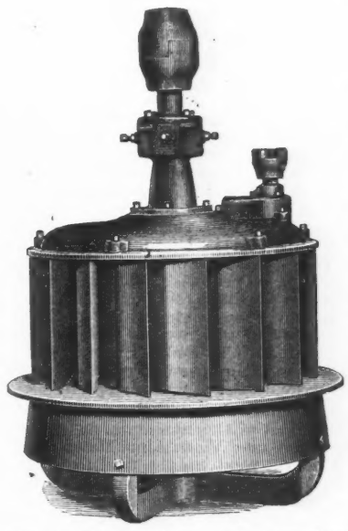

FIG. 5.—VICTOR WHEEL AND CASE COMPLETE.

SAN JUAN SILVER MINES.

Special Correspondence of the Engineering and Mining Journal.

In 1869, Messrs. John Eckels, William Hill, "Pony" Whitmore, and two others made their way from the Merino mines, near Elizabethtown, New Mexico, and discovered large bodies of ore at the present Dolores camp. Next year, Gus Begole came in with an assay outfit, and he and his partner, Eckels, discovered and worked the "Nigger Baby" (now the "Yellow Jacket," and the crack carbonate mine of the camp), and also the Dolores (now Aztec) mine, and many others. They sunk several shafts, and ran several short tunnels; but the mineral proved all of too low grade to do any thing with at that early day. After Begole and Eckels abandoned the district, each successive year a few men found their way in there, and each party picked a few feet farther into the old workings, the ore thus obtained showing a gradual increase in the yield of silver, until the spark of excitement that had been smoldering so long among a few again burst into a blaze, and once more the country at the head of the Rio Dolores is covered with tents and "bough-houses," and the hills with prospectors. The valley of the Dolores River, on the mountains on either side of which are the mines, runs nearly due north and south. As we entered it from the north end, the first thing we noticed was a pond by the side of the trail, its surface agitated by countless bubbles of gas, which rose from springs beneath. Its waters are strongly impregnated with alum. Not far from this, in the old bed of the river, was what had formerly been a beaver dam, and the brushwood and timber of which it was built had been incrusted with and finally incased in a solid deposit of lime. We broke blocks of this, and found the sticks and wood inside, some of it in a natural and some in a petrified state. On Silver Creek, near where it runs into the Dolores, and on what is now the site of the new camp, there are two log cabins in a fair state of repair. These were built by Begole and Eckels in 1870. At this point, the creek has laid bare a bed of almost solid base metal, and I can only describe its appearance as an immense overflow of zinc-blende, copper pyrites, and some galena, with a greenish rock like diorite intermixed with it. Shafts as deep as 60 feet have been sunk without finding the bottom of this deposit, and from the openings made, and that exposed by Silver Creek, there must be acres of it—ten or twenty, at least—and no one knows how much more. So far, it has not been found to carry

silver enough to make it worth working; but for a gigantic body of metal I never heard of its equal in any country.

We will now go down Silver Creek to the river, and ascend a gulch between two mountains on the west side of the valley, to visit the old Dolores, now the Aztec mine. This is a true fissure-vein, vertical, 20 to 30 feet between the walls, and showing, in the upper (old) workings, about three feet of white quartz on the south wall; then about eight feet of solid ore; and then, to the north wall, white porphyry. The ore consists of apparently pure galena, antimonial galena, concrete, zinc-blende, copper pyrites, and large quantities of the blue and green carbonates of copper, and very fine or granular iron pyrites. The country rock is limestone. This upper working is simply a sort of excavation made in solid ore about six feet wide and twenty feet in, done by Begole & Eckels. The highest average assay they got was about thirty ounces silver, which they ultimately abandoned with the rest. The present owners, Messrs. Glasgow & Schneider, have run a small tunnel below the above, about 15 feet in solid ore, and there is a lower working still, which I did not see. There are, I believe, other claimants to the property, and a fair prospect of litigation. There are two claims on this lode, each 1500 feet in length. The ore could easily be shot down the gulch to the river, where a smelter could be worked all the year round. As the rich carbonate ores found so far are not lead carbonates, if the camp amounts to any thing the Aztec lead ore will be very valuable for fluxing: and as it is much decomposed by water where worked, I fancy that when they cut in to where it is solid, it will carry more silver; for if there is such a thing as leaching out the silver in nature, it has been well leached there. The altitude of the upper working is 9200 feet above sea-level, and in thick timber; the valley is 8200 feet.

From this mine we descended to the river again, and, going along the west bank toward our camp, came upon a spring in which the ebullition of carbonic-acid gas was very powerful. The water was cold and clear, and a draught of it, when hot and thirsty, most refreshing. It has exactly the sharp taste of Schweppe's celebrated soda-water, and tasting, I should imagine, exceedingly fine with a dash of Hennessey's brandy in it.

A little farther on, we came to a 15-foot tunnel, showing on the face pyrites of iron and manganiferous iron; at the entrance lay dead orioles, wrens, linnets, mountain-rats, mice, and meadow-moles. Noticing a hole alongside the timbers, I stooped over it, and got a whiff of gas that nearly took my breath away; another inhalation of it would have keeled me over; as it was, I felt very queer in the head. Fifty yards farther on, was another tunnel of about 20 feet; face showing zinc-blende, iron, and a little galena, with more dead birds and rodents lying in it. A little farther on, a big open cut or excavation in what seemed to be a big deposit of copper ore. It abounded with earthy blue and green carbonates; some of the more solid ore had clusters of imperfectly translucent garnets, of a brownish-red color, associated with it. Fifty yards beyond, there was another large open cut in a big bank of sand-carbonates, having through it streaks of "raw" ore, or fine bright galena. Underneath this, is a stratum of limestone. Instead of its being, as is generally supposed there, a deposit, I am strongly of the belief that it is a genuine contact-vein; the overlying porphyry having been decomposed and washed away (this being the old river-bed), and replaced by alluvial earth, which is, of course, covered with a luxuriant growth of grass and weeds. All this work was done in 1870 and 1871, by Begole & Eckels. From this bed of sand-carbonates they got average assays, I believe, of 20 ounces silver. My humble opinion is, that this will turn out a big bonanza some day. One claim of 1500 feet in length along the river-bank took up all this work. Of course it is staked, but no work done.

I found here deposits of native alum, in yellowish, efflorescent crusts, and large bodies of iron pyrites in a soft, whitish rock, and some detached. Some were perfect octahedrons, and some pentagonal dodecahedrons, the size of a sparrow's egg. The alum doubtless resulted from the decomposition of the pyrites in contact with the clay rock. Evening was now drawing on, and we made our way to camp, passing, *en route*, another shaft, out of which had been taken quantities of native sulphur.

Next day, we rode up to Bangtown, as they call the group of tents pitched on Silver Creek flat, at the foot of the mountain, on which are the three crack carbonate mines—the Grand View, Alma Mater, and Yellow Jacket. Picketing our horses, we went up the trail to the Alma Mater. This is a genuine contact-vein, having porphyry overlying the ore-body and limestone under it. It dips into the mountain about 20 degrees from the horizontal line. The ore is soft and earthy, with streaks of a different color, some a brownish-red, like bog iron ore; some nearly black, and some yellowish. It is taken out with pick and shovel, and has but little weight compared with such lead carbonates as I have seen. There were about three feet of this, showing on the outcrop, which, in the foot of the workings (about 15 feet in) had narrowed down to a few inches, or, rather, appeared to have done so; for it looked to me as if a boulder of porphyry had fallen into the crevice, apparently cutting the ore out at the bottom of the inclined shaft. The altitude of this working is 9700 feet above tide-water by aneroid barometer. What the ore will average, I can not say; nor could I see how they could pretend to sort it, as there was then no assayer in the camp, and the appearance of this earthy ore gave no indication that I could see of its possible richness or leanness. The first shipment, however, to Ouray, is reported to have run at the mill 147 ounces silver to the ton. I made an assay of a piece taken at random from that lot, which ran 136 ounces. The Grand View, the next adjoining mine, owned by Sandy Campbell, has a 60-foot shaft in it, and is in a splendid body of similar ore. Unfortunately, there is some conflict of title with regard to the Alma Mater, which it is not my business to discuss, as I believe it is to be settled by the courts. The present owner of the mine is an Ouray company. There have been three shipments of ore from the Alma Mater to Ouray; but I am unable to state the yield in silver of the last two lots.

Another extension of the Alma Mater, the Eureka, owned and worked by Mr. Buchanan, of Ouray, will be a splendid mine, if he strikes the same body of ore, as his title is unquestionably clear and indisputable; but in his working there is apparently a wedge of country rock between the porphyry and limestone, but showing at the top a small streak of the carbonate ore. This wedge he is tunneling through, expecting to find the main body of ore beyond.

Descending 300 feet (perpendicular), and almost immediately below the Alma Mater working, we came to the upper working of the Yellow Jacket. This shows about six feet of ore of a similar nature and appearance to the other, but having streaks through it of hard carbonates, in which was also to be seen bright galena. The tunnel goes in about 30 feet, and had not yet cut across the vein. This is also a genuine contact-vein, and pitches into the mountain at about 15 degrees from the horizontal line, and crops down the face of the monntain in a slanting direction, parallel, I think, with the Alma Mater. Several openings have been made on the Yellow Jacket claim, all showing the same magnificent lodes of ore, one of these openings being the old work on the "Nigger Baby," discovered and worked by Begole & Eckels.

I am informed that the present owners, Messrs. Glasgow & Schneider, have been doing occasional work on the Yellow Jacket for two years past, and that, until quite lately, the ore taken out was of very low grade. There is also a dispute as to the ownership of this mine. The story that I heard was, that some Eastern parties owned the Yellow Jacket, Dolores, and other mines, and employed Glasgow & Schneider to do their assessment work, and failing to pay them, Glasgow & Schneider relocated the property in their own names. Here again is a rich pay-streak for the lawyers. I see, by the La Plata *Miner*, that 4 tons of ore from the Grand View sampled 500 ounces of silver to the ton; and 5½ tons, 80 to 250 ounces.

The day before we left, the first store of miners' supplies was opened in a tent, and a herd of beef-cattle came in. Prospectors were pouring in, and every stain and appearance of a vein was staked. Men came down to their camps every night with samples of what they had found, and which might be rich in silver, or might not carry a trace, there being no earthly clue, as far as appearance goes, to indicate their value. By this time, however, I expect the prospects of the camp are more definitely settled, as there is an assayer there. I take it that, where there are three such mines as those I have described, there will be more found, and my opinion is that, before this is in print, the Dolores will be a "roaring camp."

W. W.

Ouray, August 7, 1879.

THE TRAMWAYS OF PARIS.*

M. Rousselle, Inspecteur-Général des Ponts et Chaussées, the Government Inspector of the Paris tramways, has recently sent in his annual report, from which the following figures are tabulated, and give the broad results for the year ending July 1st, 1878:

	Lengths.	Kilometric receipts.		Horses per car.	Cars in service.	Number of passengers carried per day.
		Per day.	Per year.			
	Meters.	Francs.	Francs.			
Tramways belonging to the Omnibus Company.....	76,805	400·00	146,000	14·0	255	... .
Tramways belonging to the Southern Company.....	61,029	155·75	56,848	10·0	139	....
Tramways belonging to the Northern Company.....	43,342	131·45	47,979	10·5	87	.....
Totals.....	181,176 (112¼ miles)	....	....	....	481	351,799

The lines recently opened have, as a whole, given results surpassing the most sanguine anticipations; but the experiments on mechanical traction show that success can only be attained under the following conditions: (1) A track solidly laid, very carefully maintained, and having few or no points and crossings; (2) engines of substantial construction kept in perfect working order, developing at least 8 or 9 horse-power, and having their mechanism at a distance from the ground, or otherwise protected from the dust.

The report refers in detail to the several proposed lines now under consideration, and, in conclusion, states that "all the ideas enunciated, and all the proposals made to the administration, are examined with scrupulous attention. Nevertheless, the engineers are careful not to travel beyond the bounds of sage precaution, and not to give their sanction to any but enterprises offering legitimate prospects of success."

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

Summer Expedition of the Mining Students of the Institute to the Mines of Nova Scotia.

As the Institute is not situated in a mining district, it has been found necessary to make systematic annual expeditions to complete the course of instruction at the school, by the study of works and mines in actual operation.

The work is so arranged that, at the end of the expedition, every student has a complete set of notes of the expedition in his own possession. This set of notes forms for him a nucleus, around which his subsequent observations and reading in after-years can gather.

The party, numbering twelve in all, under the charge of Professors Ordway and Richards, left Boston for St. John's on Monday, June 30th. The party found St. John's in holiday garments, celebrating Dominion Day. Hillsborough was next visited, where, through the kindness of Mr. McHenry, the Secretary of the Albert Railway, a train was put at their disposal, which greatly facilitated the visits to the Albert mine and to Mr. McHenry's valuable limestone quarry. The Albert coal occurs in a lower carboniferous formation of bituminous shales, with abundant fossil fishes. The vein differs from most coal-seams, in being run into a crevice, as metal is run into a mold, instead of being interstratified with the country rock, as is the case with the ordinary coals. This Albertite has been the cause of much discussion among scientific men, and also of much litigation. It was, however, finally decided that it should be called coal, and as such it is now taxed. The vein is not far from the vertical, and is worked out by stoping, much

* Abstract of a paper in *Annales Industrielles*, March 23d, 1879. From the Proceedings of the Institution of Civil Engineers of London, edited by James Forrest Secretary.

after the fashion of metal mines. The deepest shaft is down 1416 feet. In the past, much difficulty has been experienced from the moving of the shales in filling up the worked-out parts. One of the present shafts, although 200 feet from the vein, has moved bodily toward the vein more than a foot. The market for the Albertite is mainly the Boston Gas-Works, where it is used to enrich the gas from other coals. The yield in 1878 was 5300 tons, and the price $18 per ton.

Mr. McHenry's limestone deposit is of great extent. It contains a little bituminous matter, which helps to burn it, and a little phosphate of lime, which betters it as a fertilizer. It is said to have certain hydraulic properties not common in limes containing so little alumina, magnesia, and silica.

The party visited the car-works of the Intercolonial Railway, where they had a fine opportunity to see locomotives in all stages of manufacture; also the hydraulic machine for forcing car-wheels on their axles; and many other details of car manufacture.

The Joggins coal mine was next visited. This mine is under the management of Mr. B. B. Barnhill, a former student of the Institute. The bord and pillar method used here is quite different from that used in Pennsylvania. On a bed dipping about 20° the bords and pillars are run horizontally from 300 to 400 feet, and are terminated by automatic inclines at the ends, called back-balances. The cars from the bords are delivered at the level below, and then hauled to the incline and hoisted out. This system is used in all the coal mines visited by the party. The yield of the mine for 1878 was about 12,000 tons. The price at the dock is $2.50 per ton. The market is mainly St. John's.

The shore of the Bay of Fundy, by the Joggins, is one of great interest to the geologist; for here can be traced beds of slate, shale, sandstone, iron ore, and coal upward of 14,000 feet in thickness, extending along the shore for over 10 miles. Some 70 seams of coal are reported by Dr. Dawson to be in this section; but few of them, however, are thick enough to work. The celebrated Bay of Fundy grindstones are taken from this cliff, about two miles north of the mine. The carboniferous sandstones and shales are very rich in fossils. The sigillaria is found here in rare perfection.

A drive of 32 miles brought the party to Parrsborough. Nine miles of the drive were over a very peculiar gravel ridge of glacial origin, called the "Boar's Back," much of which is quite as regular as a railroad embankment.

While at Parrsborough, visits were made to the various localities in the neighborhood on the Basin of Uinas, where the trap minerals are found in such perfection. The holidays spent here were very thoroughly enjoyed by all the party in collecting amethyst, heulandite, thompsonite, stilbite, etc., all of which were found quite abundantly.

The next visit was to the Londonderry iron mines and works, which mines are owned and carried on by the Steel Company of Canada, Limited. This company owns a large amount of land, including two extensive iron-ore deposits. These deposits are of peculiar interest to the geologist. The veins were apparently once composed of siderite and ankerite, neither of which minerals are rich enough in iron to use as an ore of that metal; but the weathering power of air, water, and carbonic acid has been at work upon these once hard, compact veins, and has dissolved out all the undesirable parts, leaving a rich limonite to reward the search of the miner. The veins all change from limonite to siderite and ankerite at a depth varying from 150 to 200 feet. Here we saw, for the first time in America, the old Catalan blower. It consists of a vertical tube 9 inches in diameter, 80 feet long, and a jet of water 2 inches in diameter falling into the top of it. The air, which is carried down mechanically by the water, is collected at the bottom of the tube, and is carried out through the galleries, and affords very efficient ventilation.

The company owns two large blast-furnaces capable of producing from 35 to 40 tons of iron each per day. These are not working just now, owing to the hard times. The company is, however, working a large rolling-mill for the production of bar-iron. The members of the party, after watching the dazzling brilliancy of the furnaces in this mill at night, found quite a contrast in drenching rain and pitch-dark night as they walked to the hotel.

The next stopping-place was the Pictou coal region. The Albion mine is the largest one. The party descended in a cage suspended from a wire rope to a distance of 900 feet vertically into the earth. They then spent the time in visiting the various levels, galleries, back-balances, etc., and in studying the system used in working the mine and shipping the coal. This mine is on a magnificent seam from 32 to 39 feet in thickness. The company is now operating only the upper 10 feet of the coal seam; the rest is left for the present to meet the demands of future generations. The mine is furnished with very fine pumping, hoisting, and ventilating machines, all of which formed admirable subjects for study by the members of the party. The coal is an excellent coking coal and good gas-coal.

The bord and pillar method used here is the same in general principle as that used at the Joggins, though the dimensions of the working parts are somewhat different, and the hoisting is by a vertical shaft. From the level above the main gangway, the coal is lowered by an automatic incline, and from the level below it the coal is hoisted by a gin. The company contemplates putting in an engine at this place shortly. The yield of this mine during 1878 was 59,000 tons, and the price paid was $2 at Pictou.

The Acadia mine is about three miles distant from the Albion. The seam on which this mine is situated is a bituminous, non-coking coal, and is 9 feet in thickness. The party walked down the slope-shaft 1600 feet, and had ample chance to study the very extensive workings. More than once did our guide say he wished he had known we were coming, so that he could have posted up, so many were the questions we put to him. At the special request of some of the members of the party, we were shown the fire-damp, which is so dangerous to the miners, where, without the safety-lamp, explosion and death would be certain. It was here that one of the party concluded that as the side of the safety-lamp was $\frac{1}{64}$ of an inch thick, we were all of us within $\frac{1}{64}$ of an inch of eternity. The yield in 1878 was 57,000 tons; price, $2. The party all dined at Pictou, where the tide rises and falls only five feet, while in the Bay of Fundy, only 50 miles distant, the rise is 60 feet.

At Oldham, we spent a few hours at the gold mines This is one of the most prosperous districts of Nova Scotia, though it is a small one. A good deal of gold has been mined here and saved by stamps and copper plates. The mines are none of them over 250 feet deep, and owing to the uncertainty of the deposits, shafts are sunk from the surface where there is a prospect of success, and very little underground prospecting.

No systematic effort has yet been made to save the arsenical pyrites tailings which are supposed to be rich in gold. They are all allowed to float down-stream. In the year 1878, 1808 tons were stamped in this district, and yielded 1737 ounces of gold.

At Halifax, the party visited the wonderful exposure of glacial scratches at Point Pleasant, and, of course, we all bought a new necktie, which we much needed at this period of our journey. At Windsor, N. S., there is a most extensive exposure of gypsum or plaster rock, and also of fossiliferous limestone.

We next took a day among the beautiful trap minerals of Margaretville, adding a few new varieties to those collected at Parrsborough and Blomidon.

The party returned home by steamer from St. John's.

The expedition was a financial success, as it cost less than it was estimated. It was thoroughly enjoyed by all, if we can take the expressions that have come from all hands as evidence; and, from the success with which the plans were carried out, and the enthusiasm displayed by the members of the party, it will undoubtedly prove one of the most professionally profitable expeditions the Institute has ever organized and sent into the field.

ACADIAN.

PROGRESS IN SCIENCE AND THE ARTS.

General Science.

Electric Brevities.—Mr. Chandler Roberts has lately read an interesting paper before the Physical Society, upon his examination of the behavior of metals and their alloys with the aid of Prof. Hughes's induction balance. A complete induction balance has been installed at the Royal Mint, and Mr. Roberts is engaged in testing its capability of being employed in the assaying of the precious metals. He expresses himself well pleased with the results thus far obtained. As the paper is not suited for abridgement, we refer our readers for details to the *Telegraphic Journal* (August).——M. Lagriffe is reported to have devised a combination of telephone and phonograph of such arrangement that a telephone circuit transmitting speech shall impress it with sufficient force upon a phonograph of improved construction to repeat it if desired. The instrument is said to be experimentally successful, and it has been called the *telephonographe*.

Transformation of Sound into Light.—We glean from London *Nature* the following details of a new system of transforming sound into light, devised by M. Coulon, Conservator of the Industrial Museum of Rouen. Two Geissler tubes are put in quick rotation on an axis. The induction coil of the first is worked by an ordinary interrupter, and gives the deviation of a luminous cross. The interrupter of the second is replaced by a telephone. The figure presented by the second tube projects on the first one, which is colored by uranoxide glass, and exhibits the most rapid changes according to the height of the tone delivered in the telephone trumpet. The sensibility of the changes are said to be startling and most interesting.

The Relations Existing between Arc Resistance and Current Strength, and between current strength and illuminating power, have been studied by Professors Houston and Thomson; according to whom, within a certain range of conditions, the relations in question may be formulated as follows: 1. In arcs of equal lengths, the resistances are inversely proportional to the current strengths. 2. The illuminating power of an arc is approximately proportional to the current traversing it. 3. In arcs of equal length, the total energy given out is proportional to the current strength. For the details of this investigation our readers are referred to the (August) *Journal of the Franklin Institute.*

Metallurgy.

The Hollway Process of reducing metallic sulphides, by employing the ore itself as the chief fuel for its reduction, is mentioned specially in the annual report of the Council of the (London) Society of Arts as the most remarkable and most important paper read before the society during the present year. The opinion entertained concerning its possible merits will be best given in the words of the report, namely: "The process has not yet passed beyond the experimental stage; but should it prove a commercial success, it will effect a most important economy in one of the largest industries in this kingdom. * * * * Should the process at all carry out the expectations of its inventor—and he is supported by some of our leading chemists—it will add one more to the many great inventions which it has been the constant aim of this society to introduce to the world."

The Progress of the New Dephosphorization Process is testified to by the English correspondent of the *Iron Age* in the following terms: "The steel processes in Cleveland are gradually and surely rooting out their older competitors. The Thomas-Gilchrist process is being used and perfected by Messrs. Bolckow, Vaughan & Co., who are working it largely themselves, and are granting royalties to others. * * * In almost every instance, the new Cleveland steel is found to pass the required tests with encouraging success."

Chemistry and Technology.

Technical Novelties.—A recent French patent contemplates the embellishment of metallic plates, to be tinned or galvanized, by submitting them, after being suitably polished and grained, and printed upon with the pattern to be shown in a greasy ink, to the action of an acid bath, by which the exposed parts of the plate are bitten in or deepened, and the parts protected by the ink are left in more or less relief as may be desired. The necessary relief having been secured, the plates are removed from the acid bath, the ink removed either with the aid of heat or of solvents, and the plates submitted to the galvanizing or tinning bath, or to an electro-plating process, as may be desired.——A process by which flax may be given the qualities and appearance of silk is reported to be creating a stir in Lyons. A similar idea, which we remember to

have heard of some years ago, through the efforts of the inventors to dispose of it in this country, involved the solution of the raw silk in some mineral solvent—presumably, the chloride of zinc—and its subsequent precipitation by means of a mordant upon cotton, flax, or other fiber. How far the "process" now "agitating Lyons" may be related to the idea here recalled from the oblivion of a year or two ago, we know not, though we strongly suspect they may be closely related.

Engineering, Mechanics, Miscellaneous.

The General Features of the Ship Railway, which Captain Eads proposes as a substitute for the project of a ship-canal across the American Isthmus, comprise a railway forty (40) feet in width, and having eight or ten rails, with elevated termini, hydraulic devices (locks are specified) for raising and lowering the vessels to and from the elevated termini, and a car or cradle for the reception and support of the raised vessel, such car to be made in sections, each with independent locomotive power, and supplied with a large number of supporting wheels. The distribution of the weight will not, it is claimed, affect the road-bed more severely than is the case of ordinary railways with heavy traffic. Capt. Eads, in proposing his scheme in the columns of the New York *Tribune*, asserts his entire confidence in its practicability, and estimates the cost of a ship railway such as that above described, by which loaded vessels may be raised from the water, transported overland, and floated again, at about $50,000,000.

Poor's Manual, about to be issued, shows 81,841 miles of railroad in operation in the United States at the close of 1878, an increase of 2694 miles over the figures of 1877. A noticeable feature of the reports, etc., of the companies, which is pointed out as specially noteworthy, is the very large increase in freight tonnage (though earnings from this source have diminished); and the conclusion is drawn that "the vast increase in tonnage, * * * * with no probability of any material falling off, taken in connection with the fact that a large number of roads have been reorganized upon a better financial basis than formerly, is a most favorable indication for the future as regards railway investments and the general business of the country."

The Cultivation of the Sugar-Cane seems to have become the most important industry of the Sandwich Islands. The "California Sugar Company" is now engaged in completing irrigation works in one of the numerous islands of this group, by which some 3000 acres will be rendered cultivable. When the work is completed, the entire tract will be planted with the sugar-cane, and it is expected that within the next 18 months the addition to the yield of sugar of these islands will be not less than 12,000 tons per annum from the work of this single company.

East Liverpool (Ohio) Water-Works.—A correspondent informs us that the contractor is laying the pipes, and that every indication points to flowing water by the first of October.

The St. Gothard Tunnel.—The Geneva correspondent of the *Times* telegraphs, under date of August 27th, 1879:

"The St. Gothard tunnel is rapidly approaching completion. Four thousand men are now engaged upon it, and fresh hands are being taken on daily. Eleven hundred and thirty-five meters remain to be bored. The tunnel will probably be finished by the end of the year. The Montbenere branch will be commenced on October 1st, and its completion is expected to be simultaneous with that of the main line."

Mine Safety Apparatus.—Experiments were recently made at the Earl of Dudley's Saltwells Colliery with the safety apparatus invented by Mr. Leonardt, of Birmingham, to prevent the over-winding of colliers, and loss of life by rope-breaking. The principle on which the apparatus acts is that, in the case of over-winding or the breaking of the rope in any part of the shaft, a stout collar, holding together the arrangement, is forced away, loosening a simple chain, and so releasing a pair of coil springs, which force the eccentric heads against the guide-ropes and holds them in a vise-like grip. The trials were satisfactory.

LABOR STRIKES IN GREAT BRITAIN.

London, August 25.—Six hundred more colliers have struck in North Staffordshire.

The Fife and Clackmannan colliers on Saturday last resolved to ask an advance of twelve and one half per cent in their wages, which the masters declare they are not able to grant.

London, August 26.—A crowded and enthusiastic meeting of workingmen was held in Sheffield last night for the purpose of taking steps to promote the emigration of surplus labor. A resolution was passed to the effect that, considering the prospects of trade in England, a large emigration is absolutely necessary. Another meeting is to be held in a short time to carry this resolution into effect.

GENERAL MINING NEWS.

ALASKA.

A letter from Buranoff Island, in Alaska, says that the mining outlook in that vicinity was never more favorable than at present, although operations are considerably impeded from the lack of competent miners. There are said to be, many good ledges in that vicinity and plenty of water-power to run arastras. The Stewart mine and mill recently cleaned up $1500, the result of five days' run. Wood is only $1 per cord, and ore can be milled for $2 per ton.

ARIZONA.

Yuma, August 26, 1879.—Advices just received here state there is considera ble excitement in Mineral Park. Parties from New York, Boston, Chicago, and St. Louis have recently arrived there, and are buying mining claims.

The Fairfield mine is reported to have uncovered a body of ore, assaying from $80 to $600 per ton, in a 150-foot shaft, and the company owning is pursuing the tunnel level with a large force, to develop it.

The Tombstone Company's mill is now running through from fifteen to twenty tons of ore per day, and has already turned out over $90,000 worth of bullion. The roaster is now in good running order, and the mill runs well. The Corbin Company's mill is subjected to delay on account of the hardness of the rock nto which its grade is being cut. This mill will actually stand on solid rock. Arrangements for erection of a mill for the Contention mine are completed. The mill will be a 20-stamp wet crusher, with 14 pans and 7 settlers, and will be delivered at the mill-site in a very few weeks. It is located on the San Pedro River, ten miles below the other mills. The hoisting-works on the Contention are nearly complete, and will be in operation in a few days. The main shaft of the Tough Nut is down over 100 feet now. It will tap the vein at 100 feet. Over 50 miners are employed on the works at present. Sixteen mule teams haul away from 40,000 to 50,000 pounds of ore daily. The number of shares is 500,000, at $10 each, and the dividend was, therefore, $50,000. New hoisting-works from San Francisco passed through Yuma on August 9th.

CALIFORNIA.

THE BODIE DISTRICT.

From the *Standard* of the 16th inst. we take the following: "The principal feature of last week's work was a reported strike in the Mono; and a marked improvement is reported on the south drift on the most easterly ledge, cut in the joint Bodie-Mono cross-cut on the 400 level. The main shaft of this mine is down to a depth of 474 feet. The water in the shaft is being taken out at the rate of 300,000 gallons per day. Sinking the main shaft of the Booker mine, which is now down 385 feet, will be continued to a depth of 500 feet. Water causes considerable trouble in this mine. The present milling capacity of the Bodie District is but 54 stamps—20 at the Standard, 20 at the Syndicate, 10 at the Bodie, and 4 at the Miners' mill. This milling capacity is no greater than it was a year ago. Within three months, 70 more stamps will be added, which will give the district a capacity of 124 stamps, instead of 54 as at present. The North Bulwer mine is situated on the northwest slope of High Peak Hill. Its shaft is down 58 feet. It is stated that the ledge in this mine shows a width of 15 inches of very rich ore.

COLORADO.

The *Register-Call* of August 23d says:

"Two and one half cords of ore from the Becky Sharp lode, Russell District, treated at the Tucker mill, in Russell Gulch, this week, yielded 15 ounces and 13 pennyweights of gold—at the rate of a trifle over 6 ounces gold per cord.

"The 'new find' made in the west 125-foot level of the Cashier vein on Mammoth Hill, from an assay made yesterday of an average sample of the ore, returned 18¾ ounces gold and 8 ounces silver per ton—a total currency valuation of $383.80 per ton. The deposit seems to increase in width as development is made."

THE ELK MOUNTAINS.

From the Leadville *Reveille* of August 23d we take the following:

"From a gentleman just returned from the Elk Mountain country, we learn that the Crested Mining Company's property is true fissure-veins, the ore being in lime, with quartzite and porphyry country rock. The International, on Crystal Mountain, has a six-foot vein of carbonate ore, and the vein can be easily traced on the surface for three thousand feet or more. The above-named company is the owner of eight mines in near proximity to each other; and all show very rich as well as large bodies of ore.

"The most wonderful mine examined was the Eureka, situated on the top of Treasure Mountain, 13,200 feet above the level of the sea. This mine has a vein not less than sixteen feet in thickness, ten feet of which carries gray copper. Select ore from this assays up in the thousands. There is a prospect that this mine will be stocked by a responsible company during the coming winter, and, early in the spring, will be added to the list of our ore-producers. A smelter is running at Crested Butte, and one is being built at Gothic City. The only drawback this country has at present, is the condition of the roads, which are next to impassable for any thing except pack animals."

INDEPENDENCE GULCH.

The mines of this district are situated some forty-five miles from Leadville, and in a northwest direction from Twin Lakes. The route is via the latter place, following Lake Creek up some 12 miles, where the road ends, and the Mountain Boy trail is taken to Mountain Boy Park. Here the trail takes over the range by a timber slide—a distance of about three miles—when the gulch is reached. Independence Gulch is 10 miles in length and one half mile in width, and the lower portion ends in the north branch of Roaring Fork. There are some miners and prospectors in and around there, with more continually coming.

The mines that might be called paying ones, and from which ore is being shipped, are six, and are named as follows: Independence, Last Dollar, Gadden, Mammoth, Dolly Varden, and Last Dime. The ore seems to be mostly decomposed quartz, carrying pyrites of iron and copper. Galena seems to be found higher up, and to the north. They are all well-defined fissure-veins, and vary in width between wall-rock and hanging-rock. Mill-runs give the Mammoth 7 ounces of gold, and 3 of silver, and the Independence, 16⅝ ounces of gold and 13 ounces of silver. The country near the camp is all located, but above and below there is good prospecting ground.

FRYER HILL.

The Leadville *Reveille* of August 12th says of these mines: "The explorations which have been made in the bonanzas on Fryer Hill, including the Little Pittsburg, Little Chief, New Discovery, Aimée, Deer Lodge, Montana Climax, Dunkin, Robert E. Lee, Chrysolite, Carboniferous, and Vulture mines, are equivalent to a square of 2000 feet. The superficial area of this tract is 4,000,000 feet. Assuming that the ore-deposits are only ten feet thick, which is a very low estimate, we have a total of 40,000,000 cubic feet. Allowing twenty cubic feet to the ton, we have a total of 20,000,000 tons of ore exposed. Taking the books of the various smelting establishments of Leadville as our guide, an average of $80 per ton is accorded to ores from Fryer Hill. This (in round numbers) gives a value to the square we have noted of $160,000,000. Now, on the supposition that the companies owning these properties were stoping every thing in sight, as is the custom on the Comstock, and taking into consideration that $20,000,000 has been an unusually large yield for the entire State of Nevada, Leadville has in store eight years of constant labor to exhaust the Fryer Hill bonanza. We have called attention to one locality only; there is yet in store all of Carbonate Hill proper, which includes the Shamrock, Carbonate, Yankee Doodle, Crescent, Etna, Little Giant, Catalpa, Morning Star, Waterloo, Evening Star, Wolftone, Robert Emmet, Agassiz, Pendery, and Ranchero, all of which are producing mines, and adding daily to the bullion product of the camp. Then comes the Iron mine, Cleora, Luella, Camp Bird, Adlaide, all of which are in pay. To the eastward lie the Highland Chief, the Highland Mary, the Lowland Chief, and the Black and Colorado Princes, in what is commonly known as the Breece Hill contact, and these are, all of them, in excellent ore. Pursuing a southerly course, the Rock and the Dome are also yielding largely of carbonate ore, and only the now known southern limit of the carbonate belt is attained when the Long, Derry, and Kenosho are examined on the ridge dividing Empire and Iowa gulches. In brief, the paying mines of the camp have been enumerated, and from this it may be inferred that the millions yet in store can not be worked out in six months as a would-be Clear Creek mining expert (?) would have people believe."

The Hillerton *Occident* says: "The many unfavorable reports that have gone out about the Gunnison country have, in most instances, been circulated by persons who have not given the country the proper investigation. That the mines are here, and good ones, too, has been proven beyond a doubt. Several claims have recently been located on Smythe Mountain, ten miles north of Hillerton, which assay remarkably well. The P. R. Thombs was located July 9th, and shows both galena and copper. The vein-matter is three feet in width, with a pay-streak of one foot, from which assays of 156 ounces silver and three ounces gold have been

made. Another assay returned 95 ounces of silver and two of gold. The G. Q. Richmond is an extension of the Thombs, and shows the same character of mineral. These properties are to be thoroughly developed the present season.

"The Stockman Gold Mining Company, recently organized upon the Gauntlet lode, has completed its organization. This property has been deve'oped by several shafts, the deepest of which are eighty and ninety feet, respectively. The mill ore from the Gauntlet has yielded from five to twenty ounces gold per cord. The smelting iron varies from $48 to $240 per ton, according to quality—the average, however, is $130 per ton. This mine is to be developed in a thoroughly systematic manner with a view to permanent and profitable working.

"A new company has been organized in Iowa for the development of the mines in the Summit District in Rio Grande County. Referring to the matter, the Del Norte *Prospector* of the 16th says: 'A contract has been let for the immediate erection of a ten-mill stamp at the Summit, and it has been arranged for the removal of the mills to the mines. The mill is now on the way. The survey of the mines, and every thing necessary to the immediate erection of the mill were completed this week.'"

The La Plata *Miner* gives the following list of the best-developed and best-paying mines in the San Juan country: "The Aspen and North Star, on King Solomon; Highland Mary and Pride of the West, in Cunningham Gulch; Red Rogers, Alaska, Saxon, and Bonanza, in Poughkeepsie; Adelpheh and Columbia, at the Head of Cement; the North Star, Belcher, and Cleveland, on Sultan Mountain; Prospector, Susquehanna, and Gray Eagle, on Hazleton; Philadelphia and Fannie, on Silver and Yellow Mountains on the Howard Fork."

The Gilpin County mines consume a ton of candles per day.

The Freeman silver mine at Idaho is to be permanently worked.

One hundred and fifty men are prospecting for carbonates on Taylor Hill, situated in the Eagle River District, 14 miles northwest of Leadville. The prospects are said to be quite encouraging, and smelting-works are talked of.

SILVER CLIFF.

From the *Miner* of August 22d we condense as follows:

"The Dirigo mine has a vein four feet wide between two well-defined walls, with 18 inches of mineral that averages 182 ounces of silver per ton on the foot-wall. The rest of the vein, two feet six inches, has several streaks of mineral which produces, by concentration, 48 ounces of silver per ton. These results are obtained at the depth of 55 to 60 feet from the surface, which proves by development that, as greater depth is attained, the vein gradually increases in size, width, and richness of ore.

"Carl Wulsten has sold a one-half interest in the following lodes: Prospector, Trachyte, Philadelphia, and Geyser, situated about three miles from the Cliff. A contract has been let for a 300-foot tunnel on the Prospector, ore from which assays 117 ounces to the ton.

"The Lady Franklin, Sunrise, Rocky Mountain, Gopher, and other mines, are consolidated in the 'Lady Franklin Mining and Milling Company.' Carbonates are found in these mines in quantities running up into the hundreds, and a sample from the Sunrise assayed 831 ounces. A specimen was taken from the Gopher yesterday, showing galena in the same formation as the Johnnie Bull. The mines of the company lie nearly two miles north of Silver Cliff, and join each other.

"The sampling-mill of Dillingham & Co. is working to its fullest capacity. Great quantities of ore are brought to this mill from Rosita and vicinity.

"Work has been resumed on the Silver Wing lode, at Silver Park. The owners are cutting a side-drift on their 100-foot shaft.

"The mines of Hayden Pass are showing plenty of good ore, assaying very high."

We are indebted to the Denver *Tribune* of the 24th inst. for the following:

"The Dyer mine, a Leadville property, has been stocked for $1,000,000. The Tariff mine, of the Peru District, has passed into the hands of a New York company, which, it is said, will work it actively during the coming winter. It is rumored that a party from St. Louis will erect smelting-works at Howard's Fork during the fall. The Hawkeye lode, of Grease Hill, has disclosed a body of iron pyrites at the bottom of the shaft, which carries gold in paying quantities. A diamond drill is at work at Sheep Mountain, sinking for carbonates, and is making progress at the rate of 30 feet per day. It is anticipated that another drill will be introduced in this district. Frequent new and rich strikes are reported from Ruby District, near the Ute Reservation. Work will be resumed in the Caledonia tunnel, near Georgetown, which was started up two years ago, and after driving several hundred feet, operations were suspended.

"Prof. Goldrick has bonded one of his Leadville mines for $100,000.

"There are thirty mines located at Hayden Creek, many of which are paying their own way from the ore taken out. The ore of these mines is composed mostly of gray and red copper and galena, with a combination of carbonates and sulphuret. Some of the ore assays very high in silver. The old Baker mine, Kelso Mountains, Argentine District, is being worked to advantage this season. Eight lessees are at work, and they say that they are very well satisfied with the result of their operations."

We are indebted to the Georgetown *Miner* of the 23d inst. for the following notes:

"The Montgomery Concentration Works at Idaho Springs have been running pretty steadily during the summer, but stopped a few days the present week for repairs to the rolls, etc. The present lessee of the mill has bargained for 1000 tons of Freeland ore, to commence treating it as soon as the machinery is in proper shape. There are already 50 to 60 tons of this ore on hand, and the prospects are that the mill will run entirely on Freeland mineral for a while.

"The No. 3. lode of the Joe Reynolds group has been the scene of quite an important strike within the past few weeks, and still continues to yield rich ore.

"The Cramer lease is turning out ore as usual, without showing any signs of decreasing. The owners have 10 inches of nearly solid ore, a late run of which milled 388 ounces for first-class ore and 142 for second-class. Besides the main streak of ore, there are several less important ones.

"The Daily tunnel is about 200 feet in length, drifting ahead on four inches of good ore that is opening up wider.

"On the No. 1 lode, four men are at work. This lode is opened by one adit, from which two shafts, about 55 feet apart, have been sunk, and drifting done below the tunnel level. The ore is mostly decomposed, carrying carbonate of copper, and running well in silver. The lessees have 175 sacks of ore on hand."

The Ouray *Times* prints the following Dolores item: "Senator John Jones, of Nevada, and J. P. Baily, have bonded for $80,000 the following mining property on the Dolores: * * All of the Grand View, Mayor, Aztec, Columbia, and Wide-Awake lodes, and two thirds of the Yellow Jacket, Phœnix, and Pelican lodes. The title-bonds were recorded at the Recorder's office, in Ouray, on Thursday. We are informed that negotiations are in progress for the sale of one half interest in the Alma Mater for $50,000. * * * Thirteen tons of Dolores carbonate ore passed through Del Norte in one day recently, *en route* to the Pueblo reduction works. Carbonates have been struck on Summit Creek, about eight miles from Hastings's ranch, which run from twenty-six to forty-nine ounces per ton."

DAKOTA.

THE BLACK HILLS.

From the *Pioneer* of the 16th inst. we take the following:

"Very encouraging reports are received from the Rochford District. The most active operations are going forward in the Stand-by mine. A mill is now on the way to this property. A contract has been let to furnish 1,200,000 feet of lumber at $30 per 1000. It is reported that the Mono mine has been sold for $12,000.

"The tunnel of the Clara Consolidated mine is now in 400 feet. The lower tunnel of the California is in 26 feet, the ore on the face prospecting fairly. The Atlantic mine, near Custer, is developing very encouragingly; shaft down 30 feet, very rich ore being found at the bottom of the same.

"At the Carter mine, an additional force is being put to work. Casey's 20-stamp mill of Central cleaned up 200 ounces gold, from a 14 days' run, of Pecacho ore. The recent locations on Silver Creek are turning out quite favorably. There are over 500 miners in the New Bald Mountain District. The Enos mill will soon begin on ore from the Cashier mine."

From the *News* of the 13th we condense as follows:

"The Golden Star 80-stamp mill of Lead City commenced operations on the 12th inst. Work on the shaft of the Pierce mine progresses favorably. A 60-stamp mill will be put up at this mine, and an assessment of 50c. per share has been levied to pay for it."

THE HOMESTAKE MILL AND MINE.

The same paper says of this mine and mill:

"The new 120-stamp mill of the Homestake mine has been completed, and is working smoothly, This, with the 80 stamps previously in operation, will make its crushing capacity aggregate 200 stamps, and it is anticipated to crush 525 tons per day, which it is thought will give an average monthly yield of $120,000, bringing the monthly dividends up to $75,000—equal at $900,000 per year. It is estimated that there is enough ore in sight at this mine to crush at this rate for five years to come.

"In the Golden Star cut, the chamber excavated is over 100 feet square, and over 1000 feet of tunnels and cross-cuts lead from the excavation, showing ore.

"The hoisting machinery is heavy enough to hoist from a depth of 1000 feet. This mill is run by a Corliss engine of 300 horse-power, whose total weight is 90,000 pounds. The stamps weigh 800 pounds, and will make 80 drops per minute. The machinery for the mill weighs 1,000,000 pounds. The belting alone weighs over 3 tons. Every thing is constructed in a thorough and substantial manner."

The *Herald* of the 19th says:

"The Sir Roderick Dhu Company has been running steadily for some time, and good returns are expected from the clean-up, which was made on the 18th inst. The additional 40 stamps of the De Smet mill will be in position to commence work by October 1st."

MAINE.

THE WAUKEAG SILVER MINING COMPANY.

Letters from the superintendent of this company, dated August 26th, say:

"Yesterday P.M., at a depth of 48 feet below surface of ledge in Waukeag shaft, we struck a body of quartzite precisely similar to that now worked by the Milton Company. The width of this band is, of course, unknown. It follows the hanging-wall of the 'Sullivan lode' as far as it has been explored; will make assays as soon as we know how much we have got.

"It is anticipated to get the stamp-mill of the Milton Mining Company in operation by October. The No. 1 shaft of this mine is being timbered and cemented, making it perfectly water-tight; depth, 50 feet.

"Shaft No. 2 is progressing rapidly; ore improving; depth, 40 feet. Capstone to pier for hoisting-engine now in place. Foundation for building nearly ready."

MISSOURI.

Regarding the alleged silver discoveries in the Ozark Mountains, the following dispatch is going the rounds of the press:

ST. LOUIS, August 24, 1879.

A car-load of silver ore was shipped from Fredericktown, Madison County, in this State, yesterday, to be reduced in the smelting-works in this city. The ore was taken from a mine at Silver Mountain, eight miles from Fredericktown, owned by parties in this city, who opened it a short time since and have now struck fine ore, yielding 8 ounces to the ton. A good deal of excitement exists in Madison County and along the spurs of the Ozark Mountains, which section is being vigorously prospected. This mine is a true fissure-vein, and promises a large and rich yield.

UTAH.

UTAH'S MINERAL WEALTH.

We are indebted to the Salt Lake *Tribune* of August 17th for the following:

"Professor J. S. Newberry, of the Columbia College School of Mines and Mining, was waited upon, recently, by a reporter of the *Tribune*, and asked for an expression of his opinion relative to the mineral resources of Utah. The known reputation of the professor for ability and candor will give great weight to his utterances, which are here appended:

"'PARLEY'S PARK

contains the great Ontario silver mine, and a number of others in process of development, which have not yet reached the stage of production. The general impression produced by my visit was highly favorable. The mines there are located on true fissure-veins, of which there are several systems, and give promise of greater regularity and permanence than those of most other mining districts. The Ontario is a fissure-vein, in quartzite, of good size and carrying ore of good high grade. The mine has been worked with great skill from the first, and may now be said to be a model in the system under which it has been worked, as well as in the regularity and richness of the deposit. All the improvements are of the most substantial and permanent character; its managers are evidently men of superior ability, and altogether it stands as one of the most interesting and satisfactory mines on the continent. The workings of the Ontario have as yet reached only 500 feet, although the vein has been opened to a depth of 600 feet. On the lowest level, the vein shows even better than at the surface, and every thing indicates that it will continue to be as productive, to the depth of 2500 or 3000 feet, as it has been to 500. The Ontario vein runs nearly east and west, and development work is progressing rapidly on several of the claims on its eastern and western extension. Little can yet be said of the future of the mines now being opened on the Ontario vein, as, although the ledge may be distinctly traced, its richness has not yet been demonstrated. This is in a fair way to be done, however, as the work of development is being vigorously prosecuted in the Empire, on the west, and in the Parley's Park, Lady of the Lake, and McHenry tunnel, on the east. The next claim west of the Ontario, the Last Chance, has been pretty well opened by the levels of the Ontario, which run into it. These show fine bodies of ore, and indicate that it will be a no less productive mining ground than the Ontario. Another group of veins, in the vicinity of the Ontario, has a direction oblique to the vein of that mine running northwest and southeast, and on these the Utah and White Pine mines are being opened with good indications.

"'Still another series, running nearly north and south, is represented by the Jones or the Bonanza mine, opened 200 feet, showing persistent, regular deposits, less in dimensions than those of the Ontario, but carrying ore of great richness. On the whole, the promise of the Park District is exceedingly flattering. It is well supplied with wood and water, and lies in such proximity to the coal mines of Coalville that it can always be sure of an abundance of cheap fuel.

"'LITTLE COTTONWOOD,

which includes the famous Emma, Flagstaff, and other noted mines, was the next district visited by me. The nature of the mineral deposits here is totally different from those in Parley's Park. In the Park, they are true fissure-veins, which carry comparatively little galena, and the ore is to be treated by milling rather than by smelting. In the Cottonwood, on the contrary, the ore occurs in chambers in limestone; was originally mainly galena, but is now changed to carbonate of lead. The nature of these mineral deposits is similar in all respects

to those of Eureka, Nevada. The chambers and galleries have been dissolved out of the limestone by surface water, carrying carbonic acid, and have been, in subsequent upheavals, opened by fissures, through which mineral solutions have flowed, more or less perfectly filling these cavities with ore-deposits from such solutions. Very naturally, these deposits lack the regularity and reliability of fissure-veins, and they have in many cases, as the Emma, been completely worked out, so far as known; and yet the magnitude of some of these ore-bodies, and the millions of dollars of bullion taken from them, prove that this class of deposits may be a source of great wealth. The great ore-chambers formerly discovered here have been for the most part emptied of their contents. It is by no means certain, however, nor even probable, that all the valuable ore deposits are yet known, and there is encouragement for much and long-continued exploration in the extensive belt of country which is known to be metalliferous.

"'BINGHAM CAÑON.

"'In Bingham Cañon, the general formation is quite different from that on the other side of the valley. The hills are made up of heavy beds of quartzite, and at various points by massive dikes of eruptive rock, generally, though incorrectly, called porphyry. The principal mining belt is very broad, and crosses the mountains in a northeast and southwest direction. There are here a considerable number of veins, and these vary somewhat in character among themselves. They are, however, fissure-veins, sometimes crossing and sometimes conforming somewhat to the bedding of the country rock. They are of large dimensions, and variable in their thickness at different places. On the whole, the deposits are continuous, and will be permanent, and promise long life to the mining activity of the district. The Old Telegraph, the Stewart, the Spanish, and the Jordan illustrate very well the general character of the veins in this vicinity. They lie in the same belt and have many characteristics in common. The ore-matter seems originally to have been deposited in the form of galena and iron pyrites, the former carrying silver and the latter gold. As a result of surface decomposition, the galena has been changed to carbonate, and the pyrites oxidized, forming brown hematite, which still retains the gold of the pyrites. In the Stewart, Spanish, and Jordan, the gold-bearing portion of the ore is very strongly marked, and here the vein-stone was highly siliceous, leaving a large quantity of silica in the decomposed ore. The silver-lead ores of Bingham have long been known and extensively worked. The utilization of the gold ores is the result of very recent discovery of their value; but these now promise to contribute to the mine-owners a larger measure of wealth than they have derived from the smelting ores. It is even doubtful whether they will not furnish as large a quantity of gold for some years to come as the famous gold mines of the Black Hills. The gold ores of the Bingham mines are low-grade, ranging from $6 to $30 per ton; but they are exceedingly soft, and can be mined and milled more cheaply than any gold ores known. The quantity of material to be treated is enormous. In one of the Bingham mines, the mass of visible gold-bearing ore opened by the drifts, which were made for the purpose of reaching the lead ore, is at least 30 feet thick by 500 feet in length, and rises 350 feet above the water-level. This mass, as tested by careful sampling and assaying, carries an average of $13.50 in gold, and $3 to $9 in silver. As it can be mined for less than half a dollar per ton, and milled, where water is obtainable, for an equal sum, it will be seen that the amount of gold available in these deposits is really enormous. It will, probably, be necessary to bring a large part of the gold ore down to the valley for treatment; but, in that event, the expenses will be such as to leave a large margin of profit to the mine-owners. Hence, it will not be surprising if, as has been suggested, the gold production of Bingham should overshadow that of silver. It should be said, however, that below the water-level the gold will probably be found in unchanged pyrites, and it is doubtful whether this can be profitably worked.'"

THE SILVER REEF MINES.

We are indebted to the Silver Reef *Miner* of August 16th for the following:

"Mining matters have been moving rather slowly since the great fire of May 31st, and the subsequent destruction of the Barbee mill; but there are now unmistakable signs of activity in the development of properties in the near future.

"The Leeds Mining Company, instead of shutting down the mill for want of water, as it was feared they would be obliged to do, are now running it night and day, with an abundance of water furnished by the recent rains. The mine is looking well; the working force has recently been increased, and business both around the mill and the mine presents a healthy appearance. This mine is the oldest and most developed property in the district, and has reached a depth of 860 feet. True, this is on an inclined plane, but the same amount of ore is contained in an ore-vein eight feet in width that pitches at 32 degrees and extends 860 feet as is contained in the ore-vein that pitches 80 degrees and runs the same distance. The bold croppings of the ledges, the character of the ore, and the geological formation of the country furnish all the argument needed to convince one of the permanence of these mines.

"The Stormont Company is timbering a part of the main incline of the Stormont mine, so that when it starts to work in earnest there will be no delays encountered, and the miners will feel more secure with good square sets of timbers holding the ground above them. The pump is working well, and keeps the mine perfectly dry; therefore, we may hope soon to see large quantities of ore extracted.

"*The California.*—Considerable water is being raised out of the old California shaft, which belongs to the Christy Company. The late numerous rains increased the volume; not enough, however, to cause any damage. The new California shaft, owned by the same company, is producing some fine-looking ore, and a large amount of it.

"The Duffin, situated on the River Reef, is panning out big, and is an illustration of what the mines will produce when they are half worked. Some time ago, the Duffin was bonded to Al. Grant, but Al. failed to comply with the requirements of the bond, and the mine was retained by Mr. Duffin, who leased it to chloriders. There was not much in sight when the men went to work, but they struck it rich, and in a short space of time extracted 84 tons of ore, which pulped nearly $100 per ton. There are about twenty chloriders working on the mine now, all of whom are making money fast. The Duffin has taken its stand as one of the bullion-producing mines of the camp.

"*The Last Chance.*—From the amount of ore extracted daily, one would imagine that it could not always last; but the Last Chance looks much better to-day than it did three months ago.

"The Buckeye mine is not turning out a very large supply of ore at present, as the Pioneer mill has been shut down for repairs, and the ore had to be taken elsewhere for reduction. There are only eight men working where there is actually room for five hundred. There are thousands of tons of ore in sight, and the probability is, that before long an increased force of miners will be taking it out.

"The Kinner, owned by Col. E. A. Wall, is without doubt one of the best mines in the district. It is being extensively worked by the colonel, who employs 25 miners, and has personal supervision of the work. The main working shaft is about 180 feet deep. About 150 feet north from the old workings is a perpendicular shaft 130 feet in depth, which is being worked by contractors. The ledge-matter hoisted through this shaft goes to show plainly that the ore-vein is in close proximity. Still farther to the north is a shaft 75 feet deep, from which some splendid ore has been hoisted. The intention is to connect the two latter with the main shaft, and to work the property in a systematic manner. The value of the developments assume greater importance as the drifts are advanced north and south from the second and third levels. The average yield of ore is 15 tons daily, which is being shipped to the Stormont Company's mill for reduction. This amount can be trebled when connection is made between the north and main shafts and good ventilation secured.

"*Silver Flat.*—This mine was well-named by the men who located it; for the ore lies right flat on the surface, and resembles a coal-bed in its workings. Nevertheless, the ore is just as good as though it were confined betwe en two well-defined walls. The greater portion of the ore is being worked at the Christy Company's mill.

"*The Thompson & McNally.*—This mine is situated on White Reef and belongs to the Stormont Mining Company The company is working fifteen men, three working ten hours a day extracting ore, and the balance working eight-hour shifts in driving ahead the newly-started tunnel both on the east and west sides of the reef. The distance of the tunnel when completed, according to survey, will be 203 feet; depth from surface, 71 feet; and size, 6×4 in the clear. They have worked up to date 72 shifts on the east side, and have run 66 feet. The foreman (Mr. Gamble) states that he expects to have the tunnel completed between the 5th and 10th of September next, providing the ground works as well as it is now working. On the apex of the reef, 71 feet above the level of the tunnel, is a windlass and a double car-track, by which the ore is being hoisted a distance of 150 feet. It is then dumped into a chute on the east side of the reef, where it remains till taken in wagons to the Stormont Company's mill for reduction.

"The width of the ore-vein, at a depth of 150 feet—which is the deepest they have yet attained—measures six feet between foot and hanging-wall, three feet of which is impregnated with horn-silver and black sulphurets, and assays from $200 to $1500 per ton in silver, some going even as high as $6000 per ton. There is exposed in the drift on the south side, where the tunnel will penetrate the west side of the reef, a body of ore, for a distance of 130 feet, ready to take out as soon as the tunnel is through. There are also about 500 tons piled on the different dumps, which will average between $30 and $35 per ton.

"The property is manipulated in workmanlike manner, and no such a thing as what miners term 'gutting' is resorted to by the men who have charge."

NEW PATENTS.

The following is a list of the new inventions relating to Iron, Coal, Mining Machinery, Chemical Apparatus, and the treating of Precious Metals, etc., from *The Official Gazette of the United States Patent Office*, for the week ending August 19th, 1879:

No. of Patent.	*Title of Invention.*	*Name of Inventor.*	*Residence.*
218,619	Hydrocarbon-Burner	Thomas B. Dexter (a)	Lynn, Mass.
218,659	Solution for Preserving Timber	Edmond Bonvier (b)	Pensacola, Fla.
218,666	Steam-Engine	Ezra Cope	Cincinnati, O.
218,670	Centrifugal Machine	Gustavus F. Finckgraefe	Passaic Co., N. J.
218,671	Manufacture of Ethyl-Chloride	John F. Gesner	San Francisco, Cal.
218,673	Ore-Furnace	William Heilbig (c)	Aachen, Germany
218,684	Magneto-Electric Speaking Telephone	George M. Phelps	Brooklyn, N. Y.
218,689	Device for Feeding Gas-Retort Furnaces with Ignited Coke from the Retorts	Frederick A. Sabbaton	Troy, N. Y.
218,694	Pump-Operating Mechanism	Joseph J. Verckeler	San Leandro, Cal.
218,702	Telephone and Microphone Switch	Arthur E Briggs (d)	Cincinnati, O.
218,707	Mechanical Telephone	Charles H. Billings (e)	" "
218,708	Leveling Instrument	John Clarke	Washington, D.C.
218,714	Traction-Engine	Charles G. Cooper	Mount Vernon, O.
218,718	Automatic Heat-Regulator for Furnaces	Edwin L. Dodge	Boston, Mass.
218,730	Compressed-Air Locomotive	James H. Gray	Connellsville, Pa.
218,731	Direct-Acting Pump	James H. Gray	" "
218,744	Flexible Shaft	Henry A. House	Bridgeport, Conn.
218,749	Electric Lamp	Jules C. Jamin	Paris, France.
218,752	Explosive Compound	Alfred Monnier	San Francisco, Cal.
218,771	Steam-Boiler Cleaner	Hamilton Poe	St. Louis, Mo.
218,775	Electric Telephone	Hilborne L. Roosevelt	New York City.
218,776	"	" " "	" "
218,785	Evaporating-Furnace	Alfred Shoesmith (f)	Dayton, O.

RE-ISSUE.

8,859	Chlorinating Ores	J. H. Mears	Philadelphia, Pa.

(a) Assignor of one half his right to Gilmanton Mills, Belmont, N. H.
(b) Assignor of one half his right to C. H. Bithorn, same place.
(c) Assignor of one fourth his right to Marcus S. Hopkins, Washington, D. C.
(d) Assignor to Post & Co., same place.
(e) Assignor of one third his right to Walter W. Bostwick, same place.
(f) Assignor of one half his right to William R. Nixon, same place.

THE INTERNATIONAL PATENT LAWS.—LONDON, August 16.—A Berlin dispatch to the *Morning Post* says it has been proposed to hold an international congress in the month of May next, to elaborate uniform patent laws for adoption by the nations represented in the congress.

PROPOSALS.

For the benefit of many of our readers, we compile weekly such proposals and solicitations for contracts, etc., as may be of interest. The table indicates the character of proposals wanted, the full name and address of parties soliciting, and the latest date at which they will be received:

Regulating and Grading Streets in New York; Department of Public Works, New York	Sept.	3, 1879.
Engine-House; Fire Department, 437 East Houston street, New York	"	3, "
Paving Fifth avenue, from Seventy-second to Ninetieth street, with Macadam Pavement; Department of Public Works, New York	"	3, "
Paper, Legal Cap, etc.; Hans B. Warner, Secretary of State of Wisconsin	"	3, "
Quartermaster's Stores, Jeffersonville, Ind.; James A. Ekin, Deputy Quartermaster-General, U.S.A.	"	3, "
Building and Plumbing; Department of Charities and Correction, office of Department, New York	"	4, "
Repairs Engine and Boiler; Department of Charities and Correction, 66 Third avenue, New York	"	4, "
Light-Houses and Pier, Du Pont's Powder Wharf, Delaware River; Brevet Brigadier-General W. F. Reynolds, Engineer, 4th L. H. District, Philadelphia	"	4, "
Improvement of Cape Fear River, North Carolina; William P. Craighill, 70 Saratoga street, Baltimore, Md	"	6, "
Repairing Heating Aparatus, Camden, N. J., Court House; Crawford Miller, Chairman, etc., City Clerk's Office, City Hall, Camden, N. J.	"	5 "
Improvement of James River, Virginia; William P. Craighill, 70 Saratoga street, Baltimore, Md	"	6, "
Dredging at Washington Harbor, D. C.; Mount Vernon, Va.; Breton Bay, Md.; Urbana Creek, Va.; S. T. Albert, United States Civil Engineer, 1907 Pennsylvania avenue, Washington, D. C	"	10, "
Metal Work for Light-House, at Cape Henry, Va.; O. E. Babcock, Major of Engineers, U.S.A., Light-House Engineer, Fifth District, Baltimore, Md	"	10, "
Extending Coal Dock at David's Island, New York Harbor; John Simpson, Captain and Assistant Quartermaster, U.S.A., David's Island, New York Harbor	"	10, "
Pier at Ashtabula Harbor, O.; John M. Wilson, Cleveland, O.	"	16, "
Piers at Port Clinton Harbor, O.; John M. Wilson, Cleveland, O.	"	16, "
Subsistence, Lumber, Iron, etc.; O. H. Baxter, Colorado State Penitentiary, Cañon City, Colorado	"	17, "
10,000 tons of Steel Rails to be Manufactured in New Zealand; John Knowles, Under-Secretary for Public Works, Wellington, New Zealand	"	30, "
Grain Elevator, 350,000 bushels capacity, to be delivered free of charge at Parana River, Rosario, Argentine Republic, S. A.; Henry B. Coffin, Irving House, Twelfth street and Broadway, New York		

STATISTICS OF COAL PRODUCTION.

This is the only Report published that gives full and accurate returns of the production of our Anthracite mines.

Comparative statement for the week ending Aug. 23d, and years from January 1st:

TONS OF 2240 LBS.	1879.		1878.	
	Week.	Year.	Week.	Year.
Wyoming Region.				
D. & H. Canal Co..	72,818	2,079,386	32,717	1,296,912
D. L. & W. RR. Co.	76,333	2,313,205	54,876	1,283,325
Penn. Coal Co.....	26,530	897,716	22,304	506,423
L. V. RR. Co.....	20,193	622,496	16,535	505,505
P. & N. Y. RR. Co..	817	20,987	609	19,006
C. RR. of N. J.....	40,643	1,176,269	31,793	597,803
Penn. Canal Co.....	15,367	257,255	13,181	207,261
	252,701	7,367,314	172,015	4,417,235
Lehigh Region.				
L. V. RR. Co.....	60,954	2,019,816	48,066	1,532,874
C. RR. of N. J.....	38,517	1,288,665	27,838	817,892
S. H. & W. B. RR..	512	17,270	1,482	18,185
	99,983	3,325,751	77,386	2,368,951
Schuylkill Region.				
P. & R. RR. Co.....	149,197	4,616,147	175,548	2,965,454
Shamokin & Lykens Val....	23,052	551,382	18,494	346,491
	172,249	5,167,529	194,042	3,311,945
Sullivan Region.				
Sul. & Erie RR. Co.	714	30,820	345	19,556
Total	525,647	15,891,414	443,788	10,117,687
Increase.....	81,859	5,773,727	.....	.....
Decrease	.....	.....	.....	.....

Total same time in 1877 .....12,219,071 tons.
" " " " 1876..... 9,631,063 "
" " " " 1875.....10,380,121 "
" " " " 1874..... .....11,964,491 "

The above table does not include the amount of coal consumed and sold at the mines, which is about five per cent of the whole production.

Belvidere Delaware Railroad Report for week ending Aug. 23d:

	Week.	Year. 1879.	Year 1878.
Coal for shipment at Coal Port (Trenton)	491	7,861	4,866
Coal for shipment at South Amboy	5,813	293,672	313,955
Coal for distribution.....	4,277	197,264	107,361
Coal for Company's use	1,698	56,449	50,403

The increase of shipments of Cumberland Coal over the Cumberland Branch, and Cumberland and Pennsylvania railroads, amounts to 102,685 tons, as compared with the corresponding period in 1878.

Coals Cleared on the Canals of the State of New York from Aug. 1st to Aug. 23d, inclusive:

Tons of 2000 lbs.	1879.	1878.
Anthracite.....	22,162	19,980
Bituminous.	10,945	5,032
Totals.....	33,107	25,012

Perth Amboy Business:

	Tons.
Received for the week.....	25,074
Shipped for the week.....	24,546
On hand Aug. 23d.....	153,942

The Production of Bituminous Coal for the week ending Aug. 23d was as follows:

Tons of 2000 lbs., unless otherwise designated.

	Week. Tons.	Year. Tons.
Cumberland Region, Md.		
Tons of 2240 lb	47,080	1,050,593
Barclay Region, Pa.		
Barclay R. R., tons of 2,240-lbs.....	6,018	211,800
Broad Top Region, Pa.		
Huntingdon and Broad Top R. R.....	2,193	87,751
*East Broad Top.....	1,169	40,835
Clearfield Region, Pa.		
*Snow Shoe....	776	42,840
*Tyrone and Clearfield..... 33,668		948,959
Alleghany Region, Pa.		
*Pennsylvania R. R	3,627	119,547
Pittsburg Region, Pa.		
*West Penn R. R.....	4,863	128,028
*Southwest Penn. R. R.....	922	24,738
* Penn & Westmoreland gas coal, Pa. R. R.....	14,636	483,898
*Pennsylvania R. R..... 14,135		302,074

*For the week ending Aug. 21st.

The Production of Coke for the week ending Aug. 21st:

Tons of 2000 lbs.	Week	Year.
Penn. R R. (Allegheny Region).....	933	31,544
West Penn. R. R....	2,201	60,582
Southwest Penn. R. R..... 21,449		602,911
Penn. & Westmoreland Region, Pa. R. R.	1,002	57,608
Pittsburg, Penn. R. R.....	4,270	107,140
Total..... 29,855		859,785

THE COAL TRADE REVIEW.

NEW YORK, Friday Evening, August 29, 1879.

Anthracite.

On Wednesday, the Delaware, Lackawana & Western Railroad Company, sold at public auction 50,000 tons of coal of the following sizes, for which the accompanying average prices were received, comparison being made with the last sale by the Delaware & Hudson Canal Company and the July sale of the Delaware, Lackawanna & Western Railroad Company:

Tons.	D.,L.&W.RR. aver. prices, Aug. 27.	D.&H.C.Co. aver. prices, Aug. —	D.,L.&W.RR. aver. prices, July —
15,000 Broken	$2.05	$2.00	$2.30
5,000 Egg..... ...	2.15	2.12½	2.45
25,000 Stove.....	2·376	2.32½	2.74
5,000 Chestnut.....	2·206	....	....
50,000 Gen. average.	$2.24	$2·193	$2.55¾

The last sale shows an advance of 4·7c. per ton, as compared with the Delaware & Hudson Canal Co.'s sale, but a decline of 31¾c., as compared with the Delaware, Lackawanna & Western RR. Co.'s July sale. There was a very good attendance at the sale on Wednesday, but there was no evidence that much coal was wanted at the prices that were recorded. It is the general impression that the sale was "bolstered;" and it would be impossible for any one familiar with the auction sales of coal to think otherwise. The companies, as a rule, have no desire to deceive the public at the present time as to the very demoralized condition of affairs; and, as a consequence, prices as high as the average of the Scranton sale fail to find cash buyers. An abundance of coal can still be purchased at the average of the Delaware & Hudson Canal Co.'s sale, and the indications are in favor of still lower prices.

Some of the shippers of coal, finding that the difference between the prices of coal, f. o. b., Perth Amboy and the local prices in Philadelphia furnished a libera profit for shipping to the latter place, a number of cargoes were shipped through the Delaware & Raritan Canal. The officers of the Delaware & Hudson Canal Co., having on their war-paint and thinking that they saw a scalp, have followed the example of the Lehigh shippers, and are now offering coal delivered in the Philadelphia market, where the Reading Company has had, practically, a monopoly. There can be no question but that this means war, and, unless Mr. Gowen believes, as is probably the case, that the Delaware & Hudson Canal Co. can sell only so small a quantity of a coal unknown to that market as to create no particular disturbance, there will probably be a battle in which the slain will be so numerous that even Wall street will not attempt to give them a burial.

The following dispatch, received from Philadelphia yesterday, shows that the situation is to be met:

"A largely-attended meeting of the operators of the Schuylkill coal region was held this afternoon. After a full discussion of the situation, the following prices were agreed upon for the line and city trade: Lump and steamboat, $1.75; broken, $1.85; egg, $1.95; stove, $2.10; chestnut, $1.95. These prices show a decline of 20 cents per ton on 'lump,' 'steamboat,' and 'broken;' 25 cents on 'egg,' and 'chestnut,' and 35 cents on 'stove.' The harbor prices will also be reduced as follows: Lump, steamboat, and broken, $3; egg, $3.25; stove, $3.35; chestnut, $3.20; pea, $2. The local market is well stocked, the supply at the Richmond coal wharves aggregating nearly 75,000 tons."

The outlook increases in darkness, and the belief is that the coal trade is to see the worst war of prices that has yet been recorded. There appears to be a desire upon the part of some to prolong this miserable existence, but the fiercer the battle the quicker will there be peace again by the survival of the fittest. Should the war continue fairly through the remainder of this year, the market will be so thoroughly overstocked as to seriously interfere with the ability to secure remunerative prices during next year.

There is evidently but one course to pursue to put the coal trade on a fair basis, and that is to curtail production. Whether any such arrangement can be arrived at, is a question. It is intimated that Mr. Gowen would enter into an arrangement for stopping a certain portion of each month until next spring, in which event a very profitable business might be expected in 1880.

The very low prices that are ruling and the lower ones that are probable, will have a tendency to close up the mines of the individual operators.

The Honey Brook miners have at last agreed to the company's terms, and will resume work on Monday.

The question as to whether the Reading Railroad Company has been able to borrow more money has had an important bearing on the early future of the coal trade. It has liquidated a considerable indebtedness since the return of Mr. Gowen from Europe, and, knowing that war was intended, it has undoubtedly held some money for the purpose of doing battle. We, therefore, look upon any effort to bulldoze that company at an early day as likely to prove fruitless and apt to react on those who try it.

Our Philadelphia correspondent, in writing from Philadelphia, under date of yesterday, says:

"Rates on board at Port Richmond will, from next Monday, be such that the Schuylkill Region can hold its own.

"Tolls from the breaker are to be 30 per cent of price on board, without any minimum for shipments beyond the Capes, of broken, egg, stove, and chestnut; for lump and steamer sizes, 40 per cent; and for pea coal, 60 per cent, with a minimum of 65 cents.

"Prices on board at Port Richmond start as follows, until further notice:

	Lump.	Stht.	Bro.	Egg.	Stove.	Chest.	Pea.
H. W. A....	$2.75	$2.75	$2.25	$2.25	$2.30	$2.00	$1.25
T. B. W. A..	....	....	2.00	2.10	2.30	2.00	1 25

"An extra drawback from Port Richmond to New York af 25 cents per ton will meet the rates there.

"City and Line prices, though showing a decline on circular prices for August, are the average rates at which coal has been selling for a couple of weeks. They are as follows, at Schuylkill Haven:

"Lump, steamboat, and broken, $1.85; egg and chestnut, $1.95; stove, $2.10. No change in local rates of tolls.

"The Reading RR. Co. is, like all the operators, anxious for better prices, but ready to meet the figures made by those who seek a remedy to correct the present depression in making it still worse.

"Vessels scarcer and rates a shade firmer than a week ago."

Bituminous.

So long as the war in anthracite continues, there is nothing for the producers of bituminous to do but to quietly await the end, when their prospects must improve very materially. In the mean time, there is but an unimportant business doing at very low prices.

With all the obstacles opposed to doing a large business, the shipments continue to be large. Latest reports continue to show an increase over last year. Cumberland shows for the week an increase of 2610 tons, and for the year 104,624 tons; and Clearfield, for the week 5726, and for the year 155,443 tons.

Pittsburg. Aug. 28, 1879.

COAL.—The navigation is again in order, and the coal craft that have returned from below are distributed among the collieries, enabling the miners to go to work. A general resumption has taken place, with wages reduced to 2½ cents per bushel in the three lower pools, and to 2 cents in the fourth. The large quantity of coal left over at the last rise—some five or six millions of bushels—owing to the water not being high enough to float the big boats in which it was loaded, will contribute toward making the next coal-boat run of unusual magnitude. When the collieries are all in operation, their product is 500,000 bushels a day. It will, therefore, not be long before there will be twelve or fifteen millions of bushels ready for transportation. Fuller details of the Ohio coal-trade will be found in our editorial columns. Prices in all the lower markets stand as quoted without change:

PRICES AT PITTSBURG.

Wholesale, on board.	4	cts. per bushel,	$1.06 per ton
Retail, delivered. ....6@	7	" "	1.85 "

AT CINCINNATI.

Wholesale, on board.....	8	cts. per bushel,	$2.12 per ton
Retail, delivered.....10		" "	2.65 "

AT LOUISVILLE.

Wholesale, on board.....	8	cts. per bushel,	$2.12 per ton
Retail, delivered..... ..11		" "	2.92 "

AT NEW ORLEANS.

Wholesale, on board.....50		cts. per barrel,	$4.83 per ton
Retail, delivered.....65		" "	6.28 "

Bushels are rated among dealers here at 76 lbs.; 26½ bushels make a ton of 2000 lbs., nearly.

The barrel that rules the coal measurement in New Orleans contains 2 4-7 bushels of 80 lbs. each, making about 200 lbs. Nine and two thirds of these barrels weigh a ton, within a small fraction.

COKE.—There has been no change within the past week in the condition of this industry. The work on the construction of the new ovens (about 1000) is still progressing, and the demand for the coke manufactured by the 3600 ovens in use, about 30,000 tons per week, continues brisk. Besides, there is a large prospective increase justifying the cost of new ovens sufficient to increase the aggregate product 8000 tons weekly. Quotations are without change—$1.20 @ $1.30 per ton of 2000 lbs. on board cars at the ovens.—*American Manufacturer.*

San Francisco. Aug. 21, 1879.

COAL.—Imports from January 1st to July 1st:

	Tons.		Tons.
Anthracite.....	7,798	Cumberland.....	1,587
Australian.....	25,213	English.....	6,152
Coos Bay.....	26,602	Seattle.....	85,386
Carbondale	746	Tacoma.....	845
Carmel Bay.....	350	Vancouver Island.....	88,224

It is said upon 'Change that the miners' strike at Seattle has ceased, and that work in the mines has been resumed. Imports here during the week include the following cargo parcels: Ship Drumpark, from Newcastle, N. S. W., with 2150 tons; Gussie Telfair, 368 tons, Coos Bay; City of Shanghai, from Glasgow, with 900 tons Scotch, said to have been sold prior to arrival at or about $8; Fannie Skolfield, from British Columbia, with 1728 tons Wellington, quotable at $8. The spot market seems to be fair, at prices ruling for some time past. The schooner Premier adds 432 tons Coos Bay to our stock. The Loch Doon, from Shields, brings 1152 tons.—*Commercial Herald.*

New York.

Retail Prices.

Per ton of 2000 lbs,

Anthracite.

	G. & Egg.	Stove.	Chest.
Pittston coal delivered.....$3.50		$3.75	$3.50
Lack. coal, delivered below 59th St.	3.50	3.75	3 50

Wholesale Prices of Anthracite Coal Delivery f. o. b. at Tide Water Shipping Ports, per ton of 2240 lbs.

	Lump.	Steamer.	Grate.	Egg.	Stove.	Chestnut.
WYOMING COAL.	$	$	$	$	$	$
Lackawana, at Weehawken	2 25	2 25	2 25	2 35	2 50	2 47
*Pittston, at Newburg	2 20	2 20	2 20	2 25	2 50	2 35
Kingston at Hoboken	2 20	.....	.....	2 20	2 45	2 30
Wilkes-Barre at Pt. Johnson	2 20	2 20	2 20	2 30	2 50	2 30
Plymouth R. A. at P. John.	.....	.....	2 20	2 30	2 60	2 35
LEHIGH COAL.						
†Spring Mt. at Elizabethport	3 00	.....	2 60	2 60	2 60	2 50
Cross Creek, at Port John.	2 75	2 75	2 50	2 50	2 50	2 40
Up. L. & Coun. Ri'geat Eliz'pt	3 00	.....	2 60	2 60	2 60	2 50
Hazleton at Perth Amboy	3 30	.....	2 75	2 75	2 75	2 60
SCHUYLKILL COAL.						
‡*Alongside at N.Y.Harbor.*						
Hard White Ash	.....	.....	.....	.....	.....	.....
Free-Burning W. A.	.....	.....	.....	.....	.....	.....
Schuylkill Red Ash	.....	.....	.....	.....	.....	.....
Lorberry	.....	.....	.....	.....	.....	.....
Lykens Valley Vein	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....

* Fifty cents per ton additional for delivery in New York.

† These prices are given by Whitney, McCreary & Kemmerer.

‡ On coal delivered f. o. b., at shipping wharf at Williamsburg, the current rate of harbor freight will be allowed from above prices.

Wholesale Prices of Bituminous Coal.

DOMESTIC GAS COALS.

Per ton of 2240 lbs.	At the Shipping Ports.	Alongside at New York.
Westmoreland and Penn	$4.25	.....
At Greenwich, Philadelphia	.....	$5.50
At S. Amboy	5.00	5 50
Kanawha at Richmond	4.10	5.40
Youghiogheny, Waverly Co., at Balt	4.00	5.65
Murphy Run, West Va., at Baltimore	3.75	5.85
Fairmount, West Va., " "	3 75	5.70
Newburg Orrel, Md. " "	3.75	6.00
Cannelton & Peytona Cannel, West Va.	.....	10.00
" Splint " at Richmond.	6.00	7.00
" Gas Coal at Richmond	4.00	5.65

MANUFACTURING AND STEAM COALS.

Cumberland at G'n & Alexandria.	2.75@2.90	4.35@4.50
Cumberland, at Baltimore.	2.90@3.00	4.35@4.50
Cl'rft'd "Eureka" and "Franklin."		
At mines	0.75	....
At Baltimore & Phila	3.25	4.50

FOREIGN GAS COALS.

	Sterling.	Am. cur'ncy
Newcastle at Newcastle-on Tyne	7s.6d.	$2 50@ $3.50
Liv. House Orrel, at Liv.	25s.	13.00
Ince Hall Cannel "	35s.6d.	18.00
" Gas Cannel "	25s.6d.	10 00@ 10.50
Scotch Gas Cannel, at Glasgow, nominal	25s.	7.50
	Gold.	
Bl'k House, at Cow Bay, N.S.	$1.60	....
Caledonia, at Pt. Caledonia.	1.50	$4.25
Glace Bay at Glace Bay	1.50	4.00
Lingan, at Lingan Bay	1.50	....
Intern'l Mines, at Sydney	1.60	....
Pictou, Vale Mines, at Pictou	2.00	4.70

IRON MARKET REVIEW.

New York, Friday Evening, August 29, 1879.

American Pig.—Prices are very firm. There is still a very good general business doing, although we learn of no particularly important sales. There is a large inquiry, but a hesitation on the part of many buyers. The opinion expressed by us last week, that the production is likely to be overdone, is gaining ground. A very large demand has sprung up for anthracite iron in the West during the past six weeks. We quote No. 1 Foundry at $21.50@$22.50; No. 2 Foundry, $19.50@$21; and Forge, $18@$19.

Scotch Pig.—A very active demand from the West has sprung up, from which it is presumed that the Montreal market has been pretty well cleared. We note sales of 700 tons Glengarnock for shipment from Scotland and 100 tons of Coltness on spot. We quote Eglinton at $21; Coltness, $23@$23.50; Carnbroe, $22; and Glengarnock, $22.50.

Messrs. John E. Swan & Brothers, of Glasgow, under date of August 15th, 1879, report 89 furnaces in blast, against 96 on the same date last year. The quantity of iron in Connal & Co.'s stores was 291,796 tons, an increase of 1773 tons for the week. The shipments show a slight increase for the week, and an increase of 58,097 tons since New Year's, as compared with the same period last year. The imports of Middlesbrough iron in the same comparison show a falling off of 41,694 tons. No. 1 Scotch Pig-Iron was quoted as follows: Gartsherrie, 47s.; Coltness, 53s.; Langloan, 50s.; Summerlee, 45s.; Carnbroe, 45s.; Glengarnock, 44s. 6d.; and Eglinton. 43s. 6d. Middlesbrough iron was quoted, f. o. b., Tees, as follows: No. 1 Foundry, 37s. 3d.; No. 2, 35s. 3d.; No. 3, 33s. 9d.; No. 4, 33s. 3d.; and No. 4 Forge, 32s. 9d.

Rails.—We learn of no transactions, although there is still a large inquiry. We quote iron rails at $41@$42, and steel rails at $50 here.

Old Rails.—In these, sales of 7000 tons, to be shipped from England, are reported, on private terms, and a small lot at $26.50, while a sale in Philadelphia is reported to have been made at $27. We quote at $26@$26.50.

Wrought Scrap.—Sales of 700 tons on private terms are reported. We quote at $25.50@$26.

Philadelphia. Aug. 29, 1879.

[Specially reported by Justice Cox, Jr., & Co., Iron Merchants, 333 Walnut street, Philadelphia.]

Pig-Iron.—The demand continues, with a firm market at quoted prices: No. 1, $21@$22.50; No. 2, $20@$21; Gray Forge, $19@$20.

Manufactured Iron.—The mills continue to have all the work they can do, and in most cases refuse orders for prompt delivery. We quote bars, 2c. for common, and 2 3-10 for refined iron; sheet and tank 2 7-10@2¾c. per lb.; Skelp, 2 3 10@2¾c. per lb.

Muck Bars.—The demand for muck bars continues, but it is thought to be higher in proportion to finished bars. We quote 34@36, Philadelphia.

Rails.—There is nothing new to report in steel rails. We quote $45@ $48, at tide. In iron rails, there is a demand for all the mills. We quote prices at $40@42, at mills.

Old Rails.—The demand for old rails continues, and prices continue to advance. We quote $26@$27.

Scrap.—Wrought scrap is firm in price, and in good demand. We quote, $24@$26. Cast is quoted at $14@$18, all Philadelphia.

Baltimore. Aug. 27, 1879.

[Specially reported by Messrs. R. C. Hoffman & Co.]

The iron market continues very active, and prices firm, at about following rates:

Balt. Char.	$26.00@$29.00	M. & White	$16.00@$17.00
Va. "	27.00@ 30.00	C'lC.B.Blooms	50.00@ 52.00
Anth. No. 1	21.00@ 22.00	" " Billetts	52.00@ 55.00
" " 2	19.00@ 21.00	Refi'd Blooms	45.00@ 50.00
" " 3	17.00@ 19.00		

Cincinnati. Aug. 26, 1879.

[Specially reported by Messrs. Traber & Aubery, Commission Merchants for the sale of pig-iron, blooms, ore, etc.]

Below please find closing quotations of our pig-iron market, namely:

CHARCOAL.

H'n'g Rock No. 1 Foundry & B 1	$26.00@$27.00	—4 mos.
" No. 2 "	25.00@	—4 mos.
" Mill	24.00@	—4 mos.
Tennessee No. 1 Foundry	24.00@	—4 mos.
" No. 2 "	25.00@	—4 mos.
" Mill	24.00@	—4 mos.
" Soft Silver Gray	24.00@	—4 mos.

STONE COAL.

Ohio No. 1 Foundry	$24.00@	—4 mos.
" No. 2 "	23.00@	—4 mos.
" No. 3 "	@	—4 mos.
" No. 4 "	@	—4 mos.
" Mill	23.00@	—4 mos.

COKE.

Ohio & W Va. No. 1 Foundry	25.00@	—4 mos.
" " No. 2 "	24.00@	—4 mos.
" " Stove	@	—4 mos.
" " Mill	23.00@	—4 mos.

CAR-WHEEL

H'n'g R., C. B	Jefferson, Chesapeake.	$30.00@ 35.00	—4 mos.
Missouri,	"Maramec	30.00@	—4 mos.

BLOOMS.

Charcoal	$50.00@	— cash.

SCRAP IRON.

Cast	60c. @ 80c.	—cash.
Wrought	$100@$125	"

Louisville. Aug. 26, 1879.

[Specially reported by Messrs. George H. Hull & Co.]

Market very much excited, and iron hard to get at any price. Most hot-blast irons have advanced $3 to $4 per ton since our last quotations. Cold-blast irons remain about the same, but must feel the upward movement soon.

The usual time, four months, is allowed on the quotations below:

FOUNDRY IRONS.

	No. 1.	No. 2.
Hanging Rock Charcoal	$25.00@$28.00	$23.00@$24.00
Southern Charcoal	23.00@ 24.00	21.00@ 22.00
H'n'g Rock, Ste'l & Coke	23.00@ 24.00	22.00@ 23.00
Southern Stonecoal & Coke	22.00@ 23.00	21.00@ 22.00
"Amer. Scotch"	$22.00@$23	Silver Gray $20.00@$21.00

MILL IRONS.

No. 1 Charcoal, Cold-short & Neutral	$22.00@$23.00
No. 1 Ste'l & Coke, Cold-short & Neutral	21.00@ 22.00
No. 2 Ste'l & Coke, Cold-short & Neutral	20.00@ 21.00
No. 1 Missouri and Indiana, Red-short	23.00@ 24.00
White & Mottled, Cold-short & Neutral	17.00@ 18.00

CAR-WHEEL AND MALLEABLE IRONS.

Hanging Rock, Cold Blast	$28.00@$32.00
Alabama and Georgia, Cold Blast	29.00@ 30.00
Kentucky, Cold Blast	28.00@ 31.00

Pittsburg. Aug. 26, 1879.

[Specially reported by H. A. Childs.]

The market is still very strong, with an advance, during the past two weeks, of fully $1 to $1.50 per ton.

4 mos.		4 mos.	
No. 1 F'dry	$23.00@$25.00	M. & White	$18.50@$20.00
No. 2 "	22.00@ 23.00	Hot Blast Ch.	25.00@ 28.00
Gray Forge	21.00@ 22.50	Cold Blast W.	35.00@ 40.00

Richmond, Va. Aug. 25, 1879.

[Specially reported by Asa Snyder.]

The market is unsettled, with material advance on pig-iron, bar-iron, and nails. The following quotations give the present state of the market:

Amer. Scotch Pig-Iron		$23.50@ .....
Anthracite " "	No. 1	23.50@$23.50
" " "	No. 2	21.50@ 22.50
" " "	No. 3	18.50@ 20.00
" "	Mottled	17.00@ 18.00
Coke "	No. 1	20.00@ 21.00
" "	No. 2	19.00@ 20.00
Va. Cold Blast Charcoal Pig Iron, cold short		24.00@ 25.00
" " " " "	neutral	28.00@ 29.00
" Warm " " "	red short	17 00@ 18 00
Old Rails		22.00@ 23.00
Wrought scrap No. 1		19.00@ 20.00
Cast scrap—Machinery		17.00@ 18.00
Richmond Refined Bar Iron		2.50@ .....
Horse-shoes		4.00@ .....
Mule-shoes		5.00@ .....
Old Dominion nails (standard size)		2.25 keg.
Freight by sail to Philadelphia		$1.65 for 2240 lbs.
" " " New York		1.85 " "

St. Louis. Aug. 25, 1879.

[Specially reported by Card & Hoffer.]

The past has been a week of great excitement in the pig-iron market, and it is impossible to give quotations at which iron can be bought for a day, the advances being so rapid and so large. Sales of ordinary softening irons have been made all the way from $22 to $24, while most irons are held out of the market. Under the circumstances, we quote:

COLD BLAST.

Missouri	27.C0@30.00
Southern	30.00@32.00
Ohio	32.00@35.00

IRON ORE.

Iron Mountain	$6.00@ 6.50
Southwest	5.50@ 6.00
Ore for flux	.....@ .....

CHARCOAL HOT BLAST.

Missouri	$24.00@ .....
Southern	22.00@23.00
Hanging Rock	26.00@ .....

OLD RAILS AND CAR WHEELS.

Rails	28.00@29.00
Wheels	21.00@22.00

COKE AND COAL.

Missouri	None offering.
Southern, No. 1	22.00@23.00
Ohio River, No. 1	24.00@ .....
Jackson County, No. 1	24.00@ .....
Hocking Valley, No. 1	24.00@ .....
Anthracite	24.00@ .....

No. 2 Foundry, $1 per ton less, with none offering.

METALS.

New York, Friday Evening, August 29, 1879.

The business of the week under review has not been large in any particular article, yet prices have been very well maintained, and the outlook is of the most encouraging nature.

Copper.—There has been but a small business at 16¼c., which is the price at the close for outside lots. The large companies ask 16½c. As the large consumers have contracted for several months' supplies, it is very probable that a quiet market will again rule for some time.

London advices of the 18th say:

"The Chili charters were announced this morning, for the first fortnight of present month, as 3200 tons, of which 2259 tons bars and ingots, 900 tons ores and regulus for England, and 50 tons bars for France.

	1879.	1878.	1877.	1876.
Charters, January 1st to July 31st	30,766	26,218	25,146	25,293
Charters, August 1st to August 15th	3,200	2,005	1,359	2,192
Shipments, January 1st to July 31st	28,312	25,712	26,792	27,818
Shipments, July only.	4,000	3,630	2,310	2,124

"The price at Valparaiso on the 16th inst. was $19.30, exchange 27d., and taking steamer freight at 60s., this would equal £53⅞ laid down in Liverpool, without merchant's commission."

And of the 19th:

"In Chili bars, business to the extent of about 150 tons was reported, consisting of good ordinary and favorite brands at £53¾@£54¼, according to brand and prompt. The market is in a rather unsettled state, and it is difficult, therefore, to give quotations with any precision, more especially as both buyers and sellers are exceedingly shy of exposing their hands. As nearly as it is possible to fix values, however, we call G. O. B.s, £53⅛@£53¾, named, and favorite marks, 53¾@54¼; best brands, £54@£54¾. Wallaroo and Burra remain unchanged, and we note some further trade in the former at £62¾."

London advices of August 15th say:

"Pending arrival of the telegram with advice of the Chili charters, there is not much inclination either to purchase or sell bar at the current rates; the only transaction reported was one of 50 tons favorite mark at £54⅛, usual cash terms, and this figure is still the nearest quotation for similar metals, though the choice of brands is somewhat limited. For good ordinary brands, the values rule from £54@£54¼, while best sorts stand at £55@55⅛. Australian descriptions are steady. Burra may be called £62, and rather buyers thereat; Wallaroo is quoted at £62¼@£62½. English sorts are firm, and smelters seem inclined to hold out for top rates. We call Tough £59@£63; Select, £59½@£61; India Sheets, £64@£65; other sheets, £64½@£65½. Y. M. Sheets, 5¾@5⅞d. per lb. The table of statistics herewith shows a slight increase in the stocks of copper, but the deliveries keep on a larger scale than last year. Those for August 1st to 15th, 1878, were 1459 tons, against total imports of 2489 tons, while for this year the figures are 2722 tons and 3014, respectively."

STATISTICS OF COPPER—LONDON, LIVERPOOL, SWANSEA, AND FRANCE.

		—August 1 to 15.— Imports. Tons.	Deliveries. Tons.	
Fine foreign, chiefly Australian		112	581	London.
Chili	Bars.	....	....	
	" and ingots	1,856	939	Liverpool
	in ores and regulus	96	96	& Swansea.
Total, England		2,064	1,616	
Fine foreign, chiefly American		400	450	France.
Chili bars, ingots, and barilla.		550	656	
Total		3,014	2,722	

		—Stocks.— Aug. 15. Tons.	July 31. Tons.	
Fine foreign, chiefly Australian		5,771	6,240	London.
Chili	Bars	49	49	
	" and ingots	27,617	26,700	Liverpool
	in ores and regulus	3,754	3,754	& Swansea.
Total, England		37,191	36,743	
Fine foreign, chiefly American		800	850	France.
Chili bars, ingots, and barilla.		4,628	4,734	
Total		42,619	42,327	
Chili, chartered and afloat	Mail	9,903	8,616	
	Telegram	4,800	5,900	
Total		57,322	56,843	
Chili G. O. Bs		£54¼	£53¼	
Wallaroo cake		62½	61¼	

		1879. Tons.	1878. Tons.	1877. Tons.
Imports.	Chili	31,322	32,046	31,933
	Other foreign	10,629	7,914	9,967
Total		41,951	39,960	41,900
Deliveries.	Chili	26,615	24,472	29,782
	Other foreign	10,502	6,686	8,347
Total		37,117	31,158	38,129

Tin.—Sales of 100 tons of Straits, on spot, at 15⅝@15¾c., 100 tons Australian near at hand at 15¾c.; and 100 tons of Straits, August shipment, at 15⅝@16c., are reported. The market closes strong at 16@16¼c. for jobbing lots of Straits, with 15¾c. bid for 25-ton lots, and 16c. asked. L. & F. is quoted at 15⅝@15½c. A strong combination is reported to have been made between the parties who have been sustaining the London market for a long time and the English smelters. To this is largely attributed the advance which has taken place in the price of tin during the past few weeks. London cable advices quote Straits at £69 10s.@£70, at Penang $21, and L. and F. £71. There have been large arrivals here to-day by the Canada and California; but as they were mostly for the principal holders, they have had no effect on prices.

London advices of the 19th say:

"A shade quieter, and no sales reported in either Straits or Australian, the closing quotation being 68s.@68½s. for cash and forward delivery."

Tin Plates.—There is a very good jobbing business doing, and there is no particular change in the market. We quote charcoal tins, ⅛ X, Melyn grade, at $6.25@$6.37½, and Allaway, $5.75@$5.87½; charcoal roofing, Dean and S. T. P., at $5.75, and ordinary Allaway, $5.37½; coke tins, $5.25@$5.37½, and roofing, $5.

Messrs. Sanders Brothers, of London, under date of August 15th, say:

"Just after our last, with a dull market and little demand, 'makers' met and decided to rearrange the scale of wages, a month's notice of which was given at the majority of the mills. The 'men' have also met, and deploring with their 'masters' the present position, wish the latter to redeem the trade by 'restricting the make.' They, however, give practical effect to their wishes by deciding 'that each mill by working 12 hours shall only do 36 boxes per turn, and '30 boxes per eight hours, and that in no case the tin-house men shall exceed 30 boxes per day,' and are at present carrying this out. They also resolve 'to coöperate with their employers for the mutual benefit of masters and men.'

"It is not improbable that the masters don't see it in quite the same light, and have raised the wind to reap they don't know what; but it promises to interfere with production partially, even though the questions involved are settled amicably, while, should a strike occur, the limitations will be greater, though it seems unlikely that masters will agree so unanimously as to cause any thing like total cessation, even in this latter case.

"The present effect of this is a desire to buy something for quick delivery to be able to look on with more equanimity later, and prices have hardened 1s.@1s. 6d. per box in ordinary cokes, and about 1s. for all other sorts. For ordinary brands of coke tin of the oil grade 16s. per box is now the figure generally asked. Charcoal tins are obtainable at 18s.@18s. 6d. for ⅛ X specification grade of Allaway R. G., etc., and best brands at 20s.@21s. Ternes, both charcoal and coke, are in comparatively quiet demand, quotations for the former ranging between 17s. and 17s. 6d. for 14×20, and 35s. and 36s. for 28×20, according to brands, and for the latter between 14s. 3d. and 14s. 9d. for 14×20."

The shipments of tin plates from Great Britain to the United States during the first seven months of this year amounted to 81,860 tons, as compared with 62,476 and 61,847 tons for the same periods in 1878 and 1877, respectively.

Messrs. Robert Crooks & Co., of Liverpool, under date of August 14th, say of tin and terne plates:

"Buyers, becoming convinced of the increasing probability of a strike, have, the last few days, placed large orders for coke tins and charcoal ternes. For further quantities of the former, an advance of 1s. over lowest point is now readily obtained, and only few parcels procurable even at this. Favorite brands of charcoal ternes show a similar change, while, so far, charcoal tins are very little affected. If the men refuse to work from the beginning of next month on the modified terms insisted on by masters, deliveries will be most difficult to obtain."

Lead.—It is said that sales aggregating 200 tons, in outside lots, have taken place during the week at 4·05c. The closing quotation is 4·10@4·12½c., nominal. Although Leadville has failed to come up to the estimates made early in the year, yet it is thought that the production of that camp will have a very important influence on our markets before the end of the year.

Spelter and Zinc.—Both are limited in business by the high prices which are asked for these articles. The former is held at 5¾@6c., and the latter at 7½c.

Antimony.—Cookson's is held at 12@12¼c., and Hallett's at 11¾@12c.

Quicksilver.—The San Francisco *Commercial Herald* of August 21st says: "The spot supply is short, and, with an active export demand, prices have advanced to 37c., with sales to some extent. Since writing the foregoing, we hear of considerable sales, for export to China, at 37@37½c. The outgoing steamer has freight engaged for over 3000 flasks, and the shipment may reach 4000 flasks. Some parties now ask as high as 40c. The London price is now £5 2s. 6d. per bottle, which is a rise of 5 shillings from the lowest rate of this summer. The Granada carried to Mexico 400 flasks. Degener & Co. will send by the Gaelic to Hong Kong, on the 23d inst., 500 flasks, valued at $14,000."

FREIGHTS.

Coastwise Freights.

Per ton of 2240 lbs.

Representing the latest actual charters to Aug. 29th, 1879.

PORTS.	From Philadelphia.	From Baltimore.	From Elizabethport, Port Johnson, South Amboy, Hoboken and Weehawken.
Alexandria			
Apponang			
Augusta, Me.			
Baltimore			
Bangor		1.75	
Bath, Me			1.10
Beverly	1.10		1.10
Boston, Mass.	1.30	1.30	1.10
Braintree			1.10
Bridgeport, Conn.		1.25	
Brooklyn			
Burlington			
Cambridge, Mass.	1.10@1.35		1.10
Cambridgeport			1.10
Charleston	1.00		
Charlestown			
Chestertown			
City Point			1.00
Coosaw, S. C.	1.00		
Damariscotta			1.15@1.20
Danversport			
East Cambridge			
E. Gr'nwich, R. I.			
Fall River			80
Georgetown			
Hingham			
Keyport			
Lambertville			
Lynn			
Medford			
Millville	60		
Milton	1.15		
Mystic River			
New Bedford	1.00@1.12		
Newburyport			
New Haven	85	1.25	55
New London		1.30	
Newport			80
New York	85	1.20	35
Norfolk, Va	60		
Norwich	1.05	1.40	
Norwalk, Conn		1.30	
Pawtucket			85
Petersburg	85		
Plymouth			
Portland	85†	1.25	
Portsmouth, Va.			
Portsmouth, N.H.	1.15	1.35	1.15
Providence	1.00	1.30	
Provincetown			1.10
Quincy Point			1.15
Richmond, Va.	65@75		
Rockland			1.10
Rockport			
Roxbury			
Saco			
Sag Harbor			85
Salem, Mass.	1.25@1.35	1.40	1.10
Saugus			1.00
Savannah			
Somerset			
St. John, N. B.			
Stamford			
Staten Island			
Thomaston			
Trenton	15‖	90	
Troy			
Wareham		1.40	
Washington	55@75		
Weymouth			
Wilmington, Del.	20	50	

* And discharging and towing. † And discharging. ‡ And towing. § 3 cents per bridge extra. ‖ Alongside. ¶ And towing up and down.

Lake Freights on Coal and Iron Ore.

Representing the latest actual charters up to Aug. 25th, 1879.

From	To	Rate Per ton.	From	To	Rate Per ton.
Ashtabula	Buffalo	$0.60	Buffalo	Toronto	$0.65
"	Portage	60	Cleveland	Buffalo	60
Black Riv.	Milwaukee	65	"	Chicago	65
Buffalo	Chicago	40	"	Kingston	1.25
"	Cleveland	50	"	Marquette	2.00
"	Detroit	15	Escanaba	Ashtabula	1.50
"	Kingston	35	"	Cleveland	1.50
"	Marquette	50	Marquette	Cleveland	2.00
"	Milwaukee	40	Toledo	Mackinac	60
"	Racine	60	"	Portage	70

THE BULLION MARKET.

NEW YORK, Friday Evening, August 29, 1879.

The market was very steady for the past week until Wednesday last, when the Indian Council bills were awarded at a decline, owing to the expectation that an increased amount will be offered next Wednesday. This has turned the market, and we report it weak, at rates stated below.

DAILY RANGE OF SILVER IN LONDON AND NEW YORK, PER OZ.

DATE.	London Pence.	N. Y. Cents.	DATE.	London Pence.	N. Y. Cents.
Aug. 23	51⅜	112⅝	Aug. 27	51⅜	112¼
Aug. 25	51⅜	112⅛	Aug. 28	51½	111⅞
Aug. 26	51⅜	112⅜	Aug. 29	51½	111⅞

Foreign Sales of Silver.—LONDON, August 27.—The *Times*, in its financial article says: "There was a small demand for silver for India yesterday, and a large inquiry for the Continent. About £80,000 worth, received from South America, was sold."

Government Silver Purchases.—The Treasury Department purchased on the 27th inst. 670,000 ounces of silver bullion for the Mint at Philadelphia. The offers for delivery at the Western Mints were above the market rates, and were all declined.

The English Gold Shipments to America.—LONDON, Thursday, August 28, 1879.—The *Financier* says that "£178,000 [$861,300] gold is expected by the steamer due at Southampton on the first of September. The bulk of this amount, together with the £100,000 [$485,000] which recently arrived, will probably go to meet the American demand. A great deal more bullion will undoubtedly go to America. In some quarters, it is believed that within a comparatively brief space £2,000,000 [$9,700,000] will be sent there."

One of the chief bullion houses of Paris estimates that the insufficient crops of England, France, and Germany will necessitate purchases in the United States to the amount of twenty millions sterling.

Exports of Gold and Silver.

Week ending August 23d	$52,100
Corresponding week last year	102,626
Since January 1st, this year	11,680,281
Corresponding period last year	9,744,494

Gold Interest Paid out by the Treasury.

Week ending August 23d	$232,681
Corresponding week last year	487,830
Since January 1st, this year	43,562,610
Corresponding period last year	48,047,254

Duties to be Paid in Silver.—WASHINGTON, August 26.—A dispatch dated July 30th, 1879, received at the Department of State from the United States Minister to Peru, states that the decree issued June 30th, and for a time suspended, requiring duties to be paid in silver coin, or its equivalent, has again been put in force. Previous to the issuance of this decree the duties were paid in legal tender paper soles, which the Minister states were quoted at about 1·55 per cent below silver.

The Depreciation of Silver.—LONDON, August 29.—At a meeting of the Associated Chambers of Commerce of the United Kingdom at Belfast yesterday, a resolution was passed, on motion of Mr. Wright, representative from Birmingham, to present a memorial to the government for the appointment of a Parliamentary Committee to inquire into the effect of the depreciation of silver upon the commercial interests of Great Britain, and to consider what, if any, legislative course is desirable thereon.

BULLION SHIPMENTS.

We give below a statement showing the latest bullion shipments, in addition to those announced in our issue of August 23d, 1879:

August	7th	Black Warrior, Ariz.	$3,540.37
	7th	Peck, Ariz.	7,975.31
"	10th	Cent'l Arizona (formerly Vulture).	9,000.00
"	11th	California, Nev.	13,631.38
"	15th	Alexander, "	7,205.83
"	17th	Black Hawk, Idaho	2,290.00
"	17th	Florida Hill, "	2,400.00
"	17th	South Boise, "	2,423.00
"	18th	Mountain Yankee Fork, Mont.	2,000.00
"	18th	Butte County (Cal.) mines	30,000.00
"	18th	Bodie Con., Cal	12,500.00
"	18th	Hillside, Nev.	4,400.00
"	18th	Belle Isle, "	21,000.00
"	18th	Independence, Nev	4,300.00
"	19th	Leopard, Nev.	4,000.00
"	19th	Star, Nev	5,000.00
"	20th	Standard, Cal.	39,203.00
"	20th	Gila, Nev.	9,000.00
"	21st	Richmond, Nev.	7,533.55
"	22d	Horn-Silver, Utah	2,600.00
"	22d	Old Telegraph & Morgan, Utah	6,000.00
"	22d	Ontario, Utah	2,709.15
"	22d	Christy, "	2,512.61
"	20th	Horn-Silver, Utah	10,026 lbs. bullion,
"	21st	" " "	$6,000.00
"	20th	McCormick & Co.	8,210.00
"	21st		
"	20th	Union Pacific Exp., Salt Lake City, various mines	13,106.00

Silver-Dollar Coinage.—WASHINGTON, August 25.—The coinage of standard silver dollars up to date has fallen over $500,000 behind the amount required by law. It is proposed to make up that deficiency during the present month. This, if done, will make the total coinage for August amount to over $2,600,000. The mint at Philadelphia is coining at the rate of $90,000 per day. The shipment of standard silver dollars by the Treasury for the month aggregate $571,500. To-day's shipments amounted to $55,500, as follows: Illinois, $12,000; Pennsylvania, $11,000; Wisconsin, $10,000; Ohio, $6000; Virginia, $4000; Colorado. $4000; Iowa, $3000; Indiana, $2000; Kentucky, Michigan, and Missouri, $1000 each; Kansas, $500.

The French Mint, at Bordeaux, has been abolished, and henceforth the coining is all to be done at Paris.

Sierra Nevada produced in June and July $190,134.

The bullion shipment from Silver Reef for the week ending August 16th amounted to $19,098.97.

Within two years, eleven smelting firms and companies at Leadville, Colo., have produced 3,391,500 ounces of silver. The ore smelted at present averages 70 ounces silver to the ton.

The present output of the Little Pittsburg Consolidated Mining Co. amounts to over $200,000 per month.

The 5-stamp mill, at Mineral Park, Arizona, is turning out from $1000 to $1200 per day from the Keystone and Ithaca mines.

Up to the 11th inst. the Noonday Mining Co., of Bodie, has turned out $38,590 worth of bullion since milling operations were commenced in April last.

The Product of the Ophir Mine.—The following table represents the product of the Ophir mine from December last to the close of July:

	Gold.	Silver.	Total.
December, 1878	$30,700	$39,200	$69,900
January, 1879	86,100	104,900	191,000
February	70,300	94,700	165,000
March	39,200	58,400	98,600
April	40,600	52,700	93,300
May	48,100	53,800	101,900
June	31,000	43,000	74,000
July	55,700	52,900	108,600
Totals	$401,700	$490,600	$901,300

The Martin White Company shipped, for the week ending August 15th, bullion valued at $10,149.

The Stevens iron mine, at Leadville, is now daily shipping between $7000 and $8000 worth of ore.

Sierra Nevada produced $110,492 in bullion in June, and $79,642 in July.

The July product of the Alexander mine, Nev., was $30,085.

Boulder (Colo.) shipped about $56,000 in bullion and gold-dust during the month of July.

The Evening Star mine, at Leadville, is turning out ore at the rate of fifteen tons a day.

The Stonewall Jackson mine, in Arizona, produced during the last two fiscal months as follows:

June	$14,558
July	13,484
Total	$28,042

The yield up to August 1st, 1879, was $185,931, all silver.

The superintendent of the Cashier mine (Gilpin County, Colo.), under date of August 17th, writes: "The mill (35 stamps) will be fully completed and in running order by October 1st, or sooner. The mine is in fine trim. * * Mining here is generally very profitable this year, and the bullion product of Gilpin County will not fall below $2,500,000."

Copper ore from Belleville, Nev., is regularly shipped to Dayton for reduction at Birdsall's mill, where it is made into bluestone, etc.

The Ram's Horn mine, Salmon River, Utah, has made one shipment of thirty tons this season to Salt Lake, and another of twenty-five tons is on the way. This ore, it is said, will average 800 ounces per ton.

The amount of smelting ore sold to the Boston & Colorado Smelting Works at Black Hawk this month promises to largely exceed any month, so far, in 1879. The ore-yard is literally crowded with ore.

The Caribou Consolidated Mining Co. received, in New York City, on the 27th inst., 4680 ounces of silver bullion, the result of five days' run. This mine produced in July silver to the amount of 29,349 ounces, valued at over $30,000.

For the week ending August 16th, there was shipped from Butte, Mont., bullion amounting to $30,650, besides consignments of Gagnon ore.

The Manhattan Mining Co., from the 5th to the 8th of August reduced 50 tons and 1260 pounds of ore, as follows:

Custom ore	$5,537.24
Tribute ore	1,604.05
By hired labor from Curtis shaft	5,678.80
Total assay value	$12,820.09
Bullion value	11,538.00
Average assay value per ton	251.37
Average bullion value per ton	226.23

The Standard and Bodie mines shipped on the 18th inst. bullion to the value of $58,000, of which the Standard contributed $39,000 and the Bodie $19,000.

At a recent annual meeting of the Independence Mining Company it was shown that there were 6220 tons ore crushed during the year, yielding $381,100 in silver bullion, showing an average of $61 per ton. The discount on this bullion was nearly $61,000. Dividends amounting to $125,000 were paid during the year, and the amount of cash on hand at the close was $37,340, against $52,785 at the commencement of the year. The eighth dividend of $25,000 has just been paid.

The Stormont Silver Mining Company's mill, of Silver Reef, Utah, runs nineteen hours out of every twenty-four, and enough ore is crushed in that time to keep the six amalgamating pans steadily at work. About sixty tons of ore is the average amount pulped every day—six tons to the stamp.

Bonanza Bullion Shipments.—The following is an official statement of the ore-extraction and milling-operation of the Bonanza mines, for the week ending August 16th, compared with that during the operations of the previous week:

Consolidated Virginia:

	Previous week. Tons.	Past week. Tons.
Extracted	990	1,008
Delivered to mills	954	1,008
Remaining in ore-house	99	99

California:

	Previous week. Tons.	Past week. Tons.
Extracted	1,224	918
Delivered to mills	1,224	918

$25,000 worth of silver bullion passed through Tucson on the 12th inst.

Gold bullion to the amount of over $15,000 was shipped from the Penobscot, Belmont, and Whippoorwill mines of Montana, on the 15th inst., being the result of several short runs.

The Richmond Company, of Eureka, Nev., shipped on the 19th inst., 4 bars of bullion, valued at $7701.25.

The Eureka Consolidated Mining Company has shipped from the 15th to the 22d inst., inclusive, 391,985 pounds of bullion.

FINANCIAL.

Coal Stocks.

NEW YORK, Friday Evening, August 29, 1879.

We record a total of nearly 260,000 shares as comprising the dealings in coal stocks during the operations of the past week, against 242,000 shares, as sold during the week previous. The average decline in the list for the week is about four points, and the most prominent stock in the downward movement is that of the Delaware & Hudson Canal Co., which closes to-day at 43, against 47¾, a week ago. Delaware, Lackawanna & Western stock has figured in the manipulations to the extent of 141,405 shares, which represents more than half of the total dealings. A steady decline is noticed in this stock during the business of the week. The final price to-day, of 54, shows a heavy decline for the week. Pennsylvania RR. closes at 40¾, against 41¼ last week. Sales, 41,652 shares. Reading is down to 16⅝, against 19⅜ a week ago, and shows unusual activity, the sales amounting to 37,652 shares.

AUCTION SALES.

Moshannon Coal Co., 1520 shares at	$0.05
Schuylkill Navigation Co., 38 shares at	8.50
Pennsylvania Canal 6s, $1000 shares at	81

Copper and Silver Stocks.

[Reported by S. G. STUDLEY, Commission Stock Broker, Member of the Boston Stock Exchange, No. 51 State street, Room M, Merchants' Exchange.]

BOSTON, Thursday Evening, August 28, 1879.

The market for dividend-paying coppers has been strong and higher during the week, closing lower, but firm; the balance of the list dull and neglected.

Silver stocks heavy and lower. The stringency in the money market has had a depressing effect upon the whole market.

Calumet & Hecla advanced to 190, closing 188@189½.
Franklin advanced to 8½; sales closing 7@8.
Osceola, 16¼ bid.
Quincy, 126@121½.
Central, 27½ asked.
Copper Falls is entirely neglected, without a quotation.
Ridge, 1¾ asked.
Pewabic, 2½ asked.
Silver Islet declined to 26@26½.
International, 40 bid.
Duncan Silver, 2¾@3.

Miscellaneous Stocks and Quotations.

Sales and quotations of the stocks and bonds dealt in here, at Philadelphia and Baltimore, for the week ending the 27th inst. are given in the following tables. The Philadelphia quotations will have a * affixed. The Baltimore quotations are indicated thus †.

Stocks.	Par Value.	High'st	Lowest	Closing	Sales: Shares.
American Coal Co.	$25	28	.....	.....	.....
St. L., I. M. & S. R. Co.	100	28¾	26¾	.....	*2,148
Spring Mt. Coal Co.	50	.....	.....	.....	.....
*Cambria Iron Co.	50	.....	.....	.....	.....
*Penn. Salt Mf'g Co.	50	.....	.....	.....	.....
*Westm'land C. Co.	50	.....	.....	.....	.....
*Buck Mt. Coal Co.	50	.....	.....	.....	.....
*Schuyl. Nav. Co.	50	.....	.....	.....	.....
†B. & O. RR. Co. 1st pf	.....	.....	.....	.....	.....
†B. & O. RR. Co. 2d pf	100	101¼	.....	.....	9
" " " " com	90	1?4	.....	.....	312
†George's C'k C. Co	100	.....	.....	.....	.....
†S. Clara M'g Co...	100	.....	.....	.....	.....
†Atlantic Coal Co.	10	80c.	.....	.....	80c.

Bonds.	Princ'l. When Due.	Int'est. When Due.	Hig'st.	Lowest	Amount.
D., L. & W., 7s, conv	1882	J. & D.	.....	.....	.....
" " " " 2d 7s	1907	M. & S.	.....	.....	.....
M. & E., 1st con., 7s.	1915	J. & D.	99½	98½	$12,000
" " " 2d 7s	1891	F. & A.	111	.....	4,000
N. J. C., 1st mtge. new	1890	F. & A.	116	115	3,000
" " " 1st mtge., con	1899	Q.	99⅝	96¼	120,000
" " " convt. 7's	1902	M. & N.	99¼	97	17,000
" " " Adimt bds	1903	M. & N.	103	102⅛	15,000
L. & W. B., con	1900	Q.	80⅝	76	*145,000
" " Income	1888	M. & N.	51	50	11,000
Am. Dock & Imp. 7s	1886	J. & J.	.....	.....	.....
St. L. I. M. & S. 1st mt	1892	F. & A.	111½	.....	2,000
" " " " " 2d, 7s	1897	M. & N.	.....	.....	.....
St. L. & I., M. C. & F., 1st, 7s	1891	J. & J.	.....	.....	.....
Ches. & O., 1st s'rs b	1908	M. & N	48	.....	2,000
" " 6s, cr. int. df	1918	J. & J.	21	.....	4,000
D & H C Co., 1stm. rg	1884	J. & J.	.....	.....	.....
" " " " " "	1891	A. & O.	103	.....	1,000
" " " " m. loan cp	1894	A. & O.	.....	.....	.....
" " " " " rg.	1894	.....	104	103	12,000
" " " " new mge.	.....	J. & D.	.. ..	.....	.....
" " " " 1st Pa. div., 7s, coup.	1917	M. & N.	.....	.....	.....
" " " " 1st Pa. div., 7s, rg	1917	M, & S.	.....	.....	.....
*L. V. R., 1st m. 6s, cp.	1898	J. & D.	.....	.....	.....
" " " " rg.	1898	J. & D.	116	.....	3,000
" " " 2d m. 7s, rg.	1910	M. & S.	.....	.....	.....
" " " con. m. 6s, rg	1823	J. & D.	.....	.....	.....
" " " 6s cp.	1923	J. & D.	.....	.....	.....
*Pa. RR., 1st m. 6s, cp	1880	J. & J.	103½	.....	1,000
" " g. m., 6s, cp.	1910	J. & J.	115½	.....	5,000
" " " 6s, rg.	1910	A. & O.	117½	117	5,000
" " con. m. 6s, rg.	1905	Q.	.....	.....	.....
" " " 6s, cp.	1905	J. & D.	106	.....	7,000
" " new loan, 5s	.....	.....	112	111½	8,350
*P. & R. R., 1st m. 6s, R. C. 43-44	1880	J. & J.	103	.....	5,000
*P. & R. R., 1st m. 6s, R. C. 48-49	1880	J. & J	.....	.....	.....
*P. & R. R., gen 6s, G C	1908	J. & J.	.....	.....	.....
" " " scrip	1882	J. & J.	73	70	6,015
" " " in. m. 7s, cp	1896	J. & D.	73½	.....	2,000
" " " e. m. 7s, cp.	1911	J. & D.	110¾	.....	10,000
" " " " 7s. rg.	1911	J. & D.	112	111¼	10,000
" " " cvt. 7s, R. C	1893	J. & J.	.....	.....	.....
" " C. & I. Co., Deb 7s, R. C.	1892	M. & S.	.....	.....	.....
" & R. C. & I. Co., m. 7s, R. C.	'92-3	various	...	.....	.....
*L. Nav. Co., 6s, rg. m.	1884	J & Q.	.....	.....	.....
" " " RR., rg. m.	1897	F. & Q.	.....	.....	.....
" " " cvt. Gold R.	1894	M. & S.	.....	.....	.....
" " " m Gold R. C.	1897	J. & D.	.....	.....	.....
" " " con. m. 7s, rg.	1911	J. & D.	.....	.....	.....
*P. & N. Y. C., 7s, R. C.	1890 / 1906	J. & D.	120	.....	5,000
*Pa. Canal, 6s, cp.	1910	J. & J.	80¼	79½	5,000
*Schuyl. Nav., 1st m. 6s, rg	1897	M. & Q.	.....	.....	.....
*Sus. Coal, 6s, rg	1911	J. & J.	...	.....	.....
†Balt. & O. RR., 6s.	1880	J. & J.	.....	.....	.....
" " " " 6s.	1885	A. & O.	109½	109	6,000
Total transactions for the week					$259,365

* Assented.

Gold and Silver Stocks.

NEW YORK, Friday Evening, August 29, 1879.

The past week has been a very quiet one in mining circles. The dealings in the non-productive mines under San Francisco management, which, as speculations, have, as a rule, been against Eastern investors and speculators, have, for the time being, acted as a set-back to a growth of interest in mining investments. Legitimate mining offers very large profits, but a great many persons in the East, rather than accept dividends of from two to three per cent per month on their investments, have preferred the wild promises of millions from undeveloped property where there are in reality but the smallest chances of getting any returns at all. The result has been, as is generally the case where extraordinary risks are taken, that heavy losses have been made. Had the dealings been confined to mines having respectable Eastern indorsement and management, untainted by former disreputable transactions, the results would have averaged as satisfactorily as in any other class

COAL STOCKS.

Name of Company.	Capital Stock.	Shares. No.	Par Val.	Last Dividend.	Rate per Ann.	Aug. 23. H.	Aug. 23. L.	Aug. 25. H.	Aug. 25. L.	Aug. 26. H.	Aug. 26. L.	Aug. 27. H.	Aug. 27. L.	Aug. 28. H.	Aug. 28. L.	Aug. 29. H.	Aug. 29. L.	Sales.
	*		$	Mo. Y.	A't.	Per c'nt												
Ches. & O. RR	15,000,000	150,000	100	.....	.....	7	6⅞	.....	.....	.....	.....	.....	.....	7	.....	7	.....	383
Consol. Coal	10,250,000	102,500	100	Jan. 77	2½	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Del. & H. C.	20,000,000	200,000	100	Aug 76	4	9	47½	46⅞	47¼	46¼	46	46⅝	46	46⅝	45⅞	46	43	9,143
D., L. & W. RR	26,000,000	524,000	50	July 76	2½	5	58	57	57½	56½	57⅜	56⅛	56⅞	56	56⅞	57	55¼	55⅛	54	141,405
Lehigh C. & N	10,148,350	208,971	50	Nov 76	1½	5½	.....	.....	.....	24	.....	23¾	23¾	23½	23¼	23⅜	20¾	20¼	817
Leh. V'y R. R	27,228,855	540,858	50	J'ne 79	1	4	42	.....	42	41¾	41¼	.....	42	41¾	42	.....	40¾	40½	886
Maryl'd Coal	4,400,000	44,000	100	Jan. 76	1½	1½	...	...	...	...	...	...	...	...	...	...	...	...
Morris & Es'x	15,000,000	300,000	50	.....	.....	.....	91½	91¼	90½	90¼	89½	90¼	89¾	90½	89¼	90	88¾	4,456
N. J. C. R. R.	20,000,000	200,000	100	Apr 76	2½	2½	51⅝	50⅝	51¼	50⅝	50⅝	50⅝	51	49¾	50½	49⅝	50¼	48⅝	23,040
Penn. Coal	5,000,000	100,000	50	May 78	3	...	...	...	...	...	...	...	...	...	...	150	...	20
Penn. R. R.	68,870,200	1,337,404	50	May 79	2	8	41¼	41¼	41⅜	41¼	41¼	41	41	40¾	41¼	40⅞	40⅞	40⅜	41,652
Ph. & R. R. R	34,278,175	685,563	50	Jan 76	4 2½	10	19⅜	19¼	19⅜	19	18¾	18¾	18⅞	18⅜	18⅛	18⅜	16¾	16⅝	37,672

The Delaware & Hudson Canal Co. has paid in dividends to date $38,821,104, and the Philadelphia & Reading $45,012,497 Total Sales.....259,424.

GENERAL MINING STOCKS.

Dividend Paying Mines.

Name and Location of Company.		Feet on Vein.	Capital Stock.	Shares. No.	Shares. Par Val	Assessments. Total levied to date.	Assessments. Date and amount per share of last.	Dividends. Total paid to date.	Dividends. Last Dividend.	Rate p. An	Highest and Lowest Prices per Share at which Sales were Made. Aug. 23. H.	Aug. 23. L.	Aug. 25. H.	Aug. 25. L.	Aug. 26. H.	Aug. 26. L.	Aug. 27. H.	Aug. 27. L.	Aug. 28. H.	Aug. 28. L.	Aug. 29. H.	Aug. 29. L.	Sales.
Argenta	Nev.	1,500		100,000		20,000	Feb., 1870	20,000	July, 1879	20													
Belle Isle	Nev.	1,500		100,000		200,000		75,000	Aug., 1879	10													
Belcher, G. & S.	Nev.	1,040	10,400,000	104,000	100	1,704,400	July, 1879	1 00	15,397,200	Apr., 1876	1 00												
Bobtail, G.	Col.	2,500	1,136,630	227,326	5	*				Nov., 1878	15												
Bobtail Tunnel, G.	Col.		100,000	20,000	5	52,000	July, 1873	0 30	56,000	Dec., 1878	40												
Bodie, G.	Cal.		10,000,000	10,000	100	75,000	May., 1879	1 00	900,000	Aug., 1879	1 00												405
California, G. & S.	Nev.	600	54,000,000	540,000	100				31,020,000	Aug., 1879	50	4.75	.....	4.80	4.70	4.65	4.75	4.70	4.65	4.75	4.70	4.80	4.75	1,720
Calumet & Hecla, C.	Mich.		2,000,000	80,000	25	1,200,000			14,250,000	May., 1879	5 00			190	189¾	189¾	.....	189	.....					55
Caribou Con.	Col.	1,400	1,000,000	100,000	10				30,000	July., 1879	1	6¼	.....	6⅝	.....	6	.....							215
Central, C.	Mich		500,000	20,000	25	100,000	June 1862	0 65	1,340,000	Feb., 1879	4 00												
Challar, G. & S.	Nev.	700	11,100,000	112,000	100	1,750,000	Sept. 1878	5 00	3,080,000	Feb., 1872	1 00									7	6⅞		260
Copper Falls, C.	Mich		1,000,000	20,000	50				100,000	Nov., 1871	1 00												
Cons. Virginia, G. & S.	Nev.	710	51,000,000	510,000	100	474,000	June 1873	3 00	42,120,000	Aug., 1879	50	4.80	4.70	4.85	4.70	4.75	4.70	4.80	4.75	4.75	.....	4.90	4.80	4,085
Confidence, G. & S.	Nev.	130	2,496,000	24,960	100	256,320	Apr. 1878	9 50	78,000	May., 1865	8½												
Crown Point, G. & S.	Nev.	600	10,000,000	100,000	100	2,073,370	June 1879	1 00	11,588,000	Jan., 1875	2 00									4.75			110
Eureka Cons., G. & L.	Nev.		5,000,000	50,000	100	100,000	May. 1876	1 00	4,000,000	Aug., 1879	1 00			16¾						16⅛	16¾	17⅜	90
Excelsior W'k's & M. Co	Cal.	525 acres	10,000,000	100,000	100					July, 1879	25												
Findley, G.	Geo.		200,000	200,000	1				8,000	May., 1879	1c	63	59	61	60	61	..			59	58	8,699	
Franklin, C.	Mich		500,000	20,000	25	300,000	June 1876	5 00	585,000	Nov., 1871	1 00			8	7¾	8	7¾	8¼	8				650
Gould & Curry, G. & S.	Nev.	612	10,800,000	108,000	100	3,044,000	July, 1879	1 00	3,826,800	Oct., 1870	10 00												
Grand Prize	Nev.	1,500		100,000		100,000	July, 1878	1 00	400,000	Feb., 1878	1 00												
Great Eastern		1,200	300,000	300,000	100				10,000	July, 1879	1	55	.....	54	53	52	50	52	50	52	50	52	49	13850
Green Mountain S.M.C.	Cal.	4,350	1,250,000		10				12,500	Aug., 1879	5												
Hale & Norcross, G. & S.	Nev	400	11,200,000	112,000	100	3,682,000	Mar. 1879	1 00	1,598,000	Apr., 1871	5 00							14¾	14⅜	14⅜			225
Homestake, G.	Dak		10,000,000	100,000	100	200,000	Apr., 1878	1 00	240,000	Aug., 1879	30			39		28½							120
Hukill, G. & S.	Col.	3,288	1,000,000	100,000	10	*				Dec., 1878	0 10			1.80	1.65	1.75	1.70	1.95	1.80	1.90	1.80	2	1.85	5,850
Independence	Nev.	1,500		100,000		75,000	Feb., 1878	15	175,000	July, 1879	25	2.25	2.15	2.50	2.20	2.35	2.25	2.20	2.15	2.25	2.20	2.20	2.10	7,055
Kentuck, G. & S.	Nev.	95	3,000,000	30,000	100	300,000	Aug. 1878	1 00	1,252,000	Mar. 1870	5 00												
K. K. Cons.	Nev.			50,000		350,000	Aug. 1879	1 00	50,000	Sept. 1873	0 25												
Leadville	Col.		2,000,000			*			60,000	June 1879	10	2.60	2.55	2.60	2.55	2.65	2.70	2.60	.....	3.60	.....	2.60	.....	3,740
Leeds	Uth.	3,000		60,000					78,000	Oct., 1878	0 15												
Leopard, L. G. & S.	Nev.	1,500	5,000,000	50,000	100	312,500	June 1879	50	162,500	Dec., 1876	0 50												
Little Pittsburg	Col.		20,000,000	200,000	100				800,000	July, 1879	50												
McClinton	Cal.	1,000		60,000		60,000	May. 1879	0 25															
Manhattan	Nev.			100,000		150,000	July. 1879	1 00	400,000	Feb., 1877	1 00												
Martin White	Nev.			100,000		650,000	Jan. 1879	1 50	90,000	July, 1879	0 50												
Merrimac, S.	Mas.	1,500	500,000	100,000	5	*	June		120,000	Mar.													
Minesota, C.	Mich.		1,000,000	20,000	50	436,000		1869 1 00	1,820,000	Mar. 1876	0 50												
Modoc	Cal.	4,000		100,000		450,000	Feb., 1879	0 50	50,000	Dec. 1876	0 50												
Moose	Col.	39,000	2,000,000	200,000	10	*			550,000	Mar. 1878	0 25		3	2.85	3.20	2.90				2.95	.....	3.10	2.90	3,100
National, C.	Mich.		500,000	20,000	25	195,000	Oct., 1875	1 00	380,000	Oct. 1873	1 00												
N. Y. & Colorado, G.	Col.		1,000,000	50,000	20	*			25,000	July, 1879	0 10			1.85	....	1.85	..			1.85	.....	1.80	....	700
Northern Belle, S.	Nev.	1,000	5,000,000	50,000	100				1,500,000	Nov. 1877	1 00												
Ontario	Uth.	3,000	10,000,000	100,000	100				2,300,000	Aug. 1879	50			41						41				75
Ophir, G. & S.	Nev.	675	10,080,000	100,800	100	2,538,200	Nov. 1878	1 00	1,394,400	Mar. 1864	4 00							35½						30
Osceola, C.	Mich.		1,000,000	40,000	25	880,000	Mar. 1876	2 00		July. 1879	1 50							16½						60
Pewabic, C.	Mich.		500,000	20,000	25	185,000	June 1868	3 00	460,000	July 1873	1 00												
Potosi, G. & S.	Nev	700	11,000,000	112,000	100									4.75									100
Phœnix, C.	Mich.		100,000	20,000	50	817,500	Sept. 1870	3 00	10,000	Dec. 1876	1 00												
Plumas	Cal.		1,000,000	100,000	10				151,000	July 1879	8	2.85	.....	3.00	2.85	3.05	2.95	3.10	2.95	3.05	3	3	2.95	3,250
Quincy, C.	Mich.		200,000	20,000	10				2,230,000	Feb. 1878	5 00					12½	12½							54
Raymond & Ely, G. & S.	Nev.	5,000	3,000,000	30,000	100	660,000	Apr., 1879	1 00	3,075,000	Sept. 1873	3 00												
Ridge, C.	Mich.		500,000	20,000	25	200,000			90,000	Feb. 1875	1 00												
Rye Patch	Nev.	1,000		30,000		157,500	Dec., 1878	1 00	105,000	Dec. 1877	0 25												
St. Joseph, L.	Mo.	2,000 acs.	1,000,000	100,000	10				250,000														
Savage, G. & S.	Nev.	800	11,200,000	112,000	100	4,572,000	July, 1879	1 00	4,460,000	June 1869	3 00									15⅛			150
Seaton, G. & S.	Col.	1,700	500,000	50,000	10	*				May 1877	0 10	40											100
Sierra Nevada, G. & S.	Nev.	3,650	10,000,000	100,000	100	2,850,000	June 1879	3 00	102,000	Jan. 1871	1 00												
Silver Islet	Mich											81	30½	30	28			27	20¼				210
Silver King	Ariz	1,500	10,000,000	100,000	100				450,000	Nov. 1878	0 50												
Standard	Cal.		10,000,000	100,000	100	50,000	July 1878	1 00	1,250,000	Aug. 1879	0 50							26½		27	26⅝	27	475
Yellow Jacket, G. & S.	Nev.	1,200	12,000,000	120,000	100	3,698,000	Apr., 1879	1 00	2,184,000	Aug. 1871	2 50	27				17½				10¼			135

Non-Dividend Mines.

Allouez, C.	Mich.		1,000,000	20,000	50	940,000	May	1876	5 00															
Alpha, G. & S.	Nev.	300	3,000,000	30,000	100	240,000	Mar.	1878	1 00															
Alta	Nev.	900		108,000		1,101,000	Feb.	1879	1 00															
Am. Flag, G.	Col.	5,300	600,000	60,000	10	*								20c		22c	20c	22c	20c	21c		23c	22c	5,100
Andes	Nev.	2,000		100,000		380 000	May.	1879	0 25															
Baltimore Cons.	Nev.	1,050		84,000		1,015,000	Apr.	1874	0 50															
Benton	Nev.	600		108,000		91,800	Dec.	1873	0 50															
Bechtel	Cal.			60,000		96,000	Apr.	1879	0 25											1.35		1.35		300
Belvidere	Cal.	1,500		60,000		33,000	Feb.	1879	0 20															
Bertha & Edith, G.	Vir.	645 acs.	500,000	500,000	10	*																		
Best & Belcher, G. & S.	Nev.	545	10,080,000	100,800	100	639,390	Apr.	1879	1 00			10c	7c	9c	8c	9c	8c	8c	.....	8c	7c	8c	.....	50,230
Buckeye	Col.		2,000,000	400,000	5	*																19½		10
Bullion, G. & S.	Nev.	943⅓	10,000,000	100,000	100	3,102,000	May.	1879	1 00			58c	55c	64c	58c	61c	58c	59c	58c	59c	55c	58c	54c	43,800
Bulwer	Cal.		10,000,000	100,000	100		July.	1879	1 50															
Cal., B. H.	Dak.		10,000,000	100,000	100	105,000	Sept.	1878	50			9¼				9½				9	8¾			350
Caledonia	Dak.	2,188	10,000,000	100,000	100	1,640,000	Apr.	1879	0 50			3.75				3.50				3.25		3		315
Cashier	Col.		500,000	250,000	2	*																		
Challenge	Nev.	90		50,000		10,000	Nov.	1878	0 20															
Cleveland, G	Col.	3,715	250,000	25,000	10	*																		
Cons. Imperial, G. & S.	Nev.	468	50,000,000	500,000	50	975,000	Sept.	1879	0 20			3.60	.....	3.65	3.60	3.65	3.20	3.65	3.60	3.65	3.60	3.65	3.60	2,160
Con. Pacific	Cal.	1,400	600,000	60,000	100							1.40	1.35	1.60	1.55	1.65	1.60	1.65	1.55	1.75	1.60	1.65	1.60	6,855
Dahlonega	Ga.		250,000	250,000	1	*								6¾		6¾						6		85
Dana, C.	Mich.		500,000	20,000	25	68,000	Jan.	1863	0 50			18c	.....	18c	.....	17c	.....	18c	.....	18c	.....	19c	17c	4,700
Day	Nev.	1,500	10,000,000	100,000	100	70,000	Feb.	1879	0 15															
Dayton	Nev.	1,600	10,000,000	100,000	100	750,000	Apr.	1878	0 25															
De Frees	Ariz	1,500	10,000,000	100,000	100	140,000	May.	1879	15															
Duncan, S.	Ont.		1,200,000	60,000	20	75,000	July	1879	4⅓															
Exchequer, G. & S.	Nev.		10,000,000	100,000	100	480,000	July.	1879	1 50					3¼	3									170
Gold Placer, G.	Col.		5,000,000	200,000	25																			
Goodshaw	Cal.		10,000,000	100,000	100	30,000	Apr.	1879	0 10			15c	14c	14c	.....	15c	14c	15c	14c	15c	.....			6,100
Granville, G.	N. C.	1,231 acs.	300,000	300,000	1	*						23c	.....	25c	22c	23c	22c	23c	22c	23c	.....			6,400
Humboldt, C.	Mich.		500,000	20,000	25	100,000	Sept	1878	0 15															
Hussey	Nev.	4,500	10,000,000	100,000	100	125,000	May.	1879	0 15															
International, S.	Ont.		1,200,000	60,000	20																			
Julia, G. & S.	Nev.	3,700	11,000,000	110,000	100	872,500	July.	1879	1 25													4.40		10
Justice, G. & S.	Nev.	2,700	10,500,000	105,000	100	2,868,500	May.	1879	1 00															
King's Mountain, G.	N. C.		1,200,000	120,000	10	*																		
Kossuth	Nev.	2,700	10,700,000	108,000	100	421,200	Aug.	1877	0 15															
Lacrosse	Col.	3,900	1,000,000	100,000	10															18c				100
Leviathan	Nev.	2,000	10,000,000	100,000		265,000	Mar.	1879	25															
Lucerne	Col.	4,200	5,000,000	500,000	10	*										19c	18c	19c	18c			19c		900
Madison, C.	Mich.		500,000	20,000	25	123,000	Sept	1876	0 10													55c		200
Mariposa preferred	Cal.	44,387	5,000,000	50,000	100	1,425,000	June	1877	1 00			28c	26c	28c	.....	27c	26c	28c	27c	28c	27c	28c	27c	5,000
" common	Cal.	acres.	10,000,000	100,000	100	1,425,000	June	1878	1 00															
May Belle		1,500	10,000,000	100,000	100							2½				2½								200
McCracken	Ariz	4,500	10,000,000	100,000	100	100,000	Oct	1878	0 50															
Mexican, G. & S.	Nev.	600	10,080,000	100,800	100	318,200	July.	1879	2 00															
Mono	Cal.	750	5,000,000	50,000	100	75,000	Mch.	1879	0 50															
Navajo	Nev.	500	10,000,000	100,000	100	145,000	Feb.	1879	0 20															
New York	Nev.	1,000	10,000,000	100,000	100	80,000	Apr.	1879	0 40															
Orig. Keystone	Nev.	1,500	10,000,000	100,000	100	125,000	Aug.	1879	0 25															
Overman, G. & S.	Nev.	1,200	3,840,000	38,400	100	3,404,280	Mar.	1879	3 00															
Petherick, C.	Mich.		500,000	20,000	100	165,533		1876	0 50															
Quicksilver preferred	Cal.	8,500	4,291,300	42,913	100	*										38½	38¼					38		250
" common	Cal.	acres.	5,708,700	57,087	100	*	Apr.																	
Seg. Belcher, G. & S.	Nev.	160	640,000	6,400	100	244,800	Apr.	1876	1 00															
Silver Hill, G. & S.	Nev.	5,400	10,800,000	108,000	100	1,404,000	Feb	1879	0 50															
Silver Prize	Nev.	1,500	10,000,000	100,000	100	65,000	Mar	1879	0 25															
South Hite S. M. Co.	Cal.		2,500,000	100,000	25							1.65	1.60	1.65	.....	1.65	1.60	1.65	.....			1.65	.....	2,800
Star, C.	Mich.		500,000	20,000	25	265,000	Mar	1876	0 50															
Superior, C.	Mich.		500,000	20,000	25	340,000		1878	0 25															
Sutro Tunnel	Nev.		20,000,000	2,000,000	10		July		0 50			4⅜		4¼	4	4⅜	4	4⅜	4	4¼	4	4		7,225
Tiptop	Ariz		10,000,000	100,000	100	120,000	Apr.	1878	0 50			96c	95c					1	97c	1.05	1	95c	90c	1,850
Tioga	Cal.	1,500	10,000,000	100,000	100	80,000		1879	0 20									3.95	3.90					350
Trio	Col.	1,250	150,000	150,000	1		Apr.																	
Trojan	Nev.	1,500	10,000,000	100,000	100	265,000	Mar.	1879	0 25															
Tuscarora	Nev.		10,000,000	100,000	100	35,000	Sept.	1879	0 10			17c				18c	16c	16c	15c	16c	15c	15c		9,400
Union Cons. G. & S.	Nev		10,000,000	100,000	100	860,000	Sept.	1879	2 00											57⅛		55⅞		20
Utah	Nev	1,000	2,000,000	20,000	100	1,060,000	Jan.	1879	2 50															
Ward	Nev	1,200	11,000,000	110,000	100	99,000	Apr.	1879	0 30															
Wells Fargo	Nev	1,500	10,000,000	108,000	100	242,000		1879	0 25															

G. Gold. S. Silver. L. Lead. C. Copper. * Non-Assessable.

Total Assessment levied to date..... $64,364,993

Total Dividends paid to date..... $155,588,080

Total Shares sold during the week..... 210,280

of securities. We have a number of good mines represented in this market which are giving very satisfactory returns, and others that certainly will do so. We are promised several mines during the fall, which will be as safe for investors as the stocks of coal, iron, manufacturing, and gas companies; and if the Eastern people will confine their investments to only such mines as will make a full exhibit of what they are asking the public to invest in, indorsed by high expert authority and followed by managements that will command public confidence, there need be no fear of the growth of the mining interest in the East. Neither speculators nor investors have much, if any, chance in the Comstock or Tuscarora stocks and those of some of the other districts under San Francisco management; not so much that the mines there are all worthless, but that they are nearly all managed exclusively in the interest of stock manipulators, and an outsider has no more chance of fair play than if he were playing against loaded dice.

A fair array of Bodie stocks has been dealt in, yet the totals are not large and indicate a lack of interest in this district. Those who hold these stocks would, as a rule, show a loss in selling at present prices, and are, therefore, unwilling to part with their shares, while the public does not appear to see bargains in even current offerings.

Bodie only records 405 shares at $11¼@$11.

Standard has been very quiet, there being no transactions during two days, and only 475 at $26½@$27 for the week.

North Standard has come forward, and, according to the official list of the Mining Exchange, 100 shares were sold at $2.25. Now, if putting on the first figure is a typographical error, the buyer may have a fair gamble; but if $2.25 per share was paid, somebody has the greatest of chances of being badly "stuck."

Bechtel records sales of 300 shares at $1.35, the dealings being confined to yesterday and to-day.

Stray sales of Bulwer aggregate 350 shares at $9¼@$8¾.

Consolidated Pacific, which a few weeks ago recorded weekly sales amounting to several thousand shares, this week only furnishes an aggregate of 85 shares at $6½@$6¾, which is far above its value.

The sales of Tioga amount to 350 shares at $3.90@$3.95.

There has been a fair business in the Comstock mines.

California has ranged between $4.65 and $4.80, with sales of 1720 shares.

Consolidated Virginia continues to be the favorite of the Comstock shares, the sales amounting to 4085 shares at $4.70@$4.90.

Yesterday, 140 shares of Crown Point sold at $4.75.

On Wednesday and yesterday, the sales of Hale & Norcross amounted to 225 shares at $14⅝@$14⅞.

On Wednesday, 30 shares of Ophir sold at $35½.

In Potosi, 100 shares at $4.75 covers the business of the week.

Yesterday, 150 shares of Savage sold at $15⅛.

Yellow Jacket records sales of 135 shares at $17½@$16¼.

Ten shares of Best & Belcher sold to-day at $19¾.

Consolidated Imperial has been fairly active, the sales amounting to 6855 shares at $1.35@$1.65. Points are still given to purchase this stock. It is certainly not a purchase on merit; and if it advances further, on manipulation, those who go in may have a "good time" getting out. The boys were once badly bitten on points, and they will certainly be again, unless they are very careful.

Ten shares of Julia sold to-day at $4.40.

On Wednesday and yesterday, 90 shares of Mexican sold at $33¼@$35.

Sutro Tunnel shows a little more activity, but an inclination to weakness. The sales aggregate 7225 shares at $4⅝@$4.

Yesterday, 260 shares of Chollar sold at $7@$6⅞.

Kossuth records sales of 100 shares at 18c.

In Union Consolidated, the dealings amount to 20 shares at 57½@55¾.

To-day, 200 shares of Leviathan sold at 55c.

The Tuscarora stocks show great activity.

Independence records the very large business of 7055 shares, at $2.35@$2.10. The past history of the manipulations of these stocks should be a warning to those who feel inclined to touch them.

Tuscarora shows one blank day, and still total sales of 9400 shares at 18@15c.

In the Black Hills stocks, there has been but little business, except in Great Eastern, in which the dealings have amounted to 13,850 shares at 55@49c.

The dealings in Homestake were confined to Monday and Tuesday, and amounted to 120 shares at $39@38½.

Caledonia has been quiet and weak, the sales amounting to but 315 shares at $3.75@$3.

In miscellaneous stocks, we note sales of 90 shares of Eureka at 16½@17⅝, the latter figure being secured to-day.

Tip Top has been fairly active, the sales amounting to 1850 shares at $1.05@90.

In the stocks on the regular lists of our exchanges, and not previously noted, we observe the following transactions:

Caribou has been quiet and inclined to weakness. The sales amount to 215 shares at $6⅛@$6.

Leadville has become very quiet, as compared with many weeks past. The sales amount to but 3740 shares at $2.70@$2.55.

Moose makes up a record of 3100 shares, but the transactions do not bear a healthy appearance.

New York & Colorado shows dealings amounting to 700 shares at $1.85@$1.80.

Plumas has been unusually active, and is stronger. The sales amount to 3250 shares at $2.85@$3.10.

Seaton, which seldom appears in the dealings now, records 100 shares at 40c.

Cleveland has had dealings aggregating 2100 shares at $3.60@$3.65.

Mariposa Common records 200 shares at $2½.

Quicksilver Preferred has had dealings amounting to 250 shares at $38½@$38.

South Hite, with the appearance of "washing," records sales of 2800 shares at $1.60@$1.65.

The "fancies" have had a fair amount of business. The sales of Bertha & Edith amount to 50,200 shares at 7@9c. Buckeye has been irregular, the sales amounting to 43,800 shares at 64@54c. American Flag shows sales of 5100 shares at 20@23c. Dahlonega records 4700 shares at 17@19c. Gold Placer has ranged between 14 and 15c., with sales at 6100 shares. Granville records 6400 shares at 25@22c. Lacrosse shows but 900 shares at 18@19c. Lucerne has had dealings amounting to 5000 shares at 26@29c.

We have before us a copy of the prospectus of the Tropic Mining Company, recently organized under the laws of this State, with a capital stock of $1,500,000, divided into 150,000 shares of the par value of $10 each. The Company's property consists of the Tropic and other veins in Clear Creek County, Colorado. The Board of Directors is composed of some very respectable and financially strong gentlemen. This mine is very favorably mentioned in Fossett's *Colorado*, on account of its development and large ore-reserves. The experts report this property thoroughly proved and showing sufficient ore-reserves to insure good regular dividends.

The Sultan Hill Mining Company, according to S. D. Prescott, owns several very promising prospects in the Indian Mining District, Mono County, Cal.

We learn that the Chrysolite and Carboniferous mines, located on Fryer Hill, at Leadville, Colo., are to be brought to this market under very high expert indorsement. This is one of the richest groups of mines in this country. So far as we can learn, the stock will be offered on favorable terms.

REVIEW OF THE SAN FRANCISCO MARKET.

A little improvement is noticeable in the majority of the quotations of the San Francisco list. The desired "boom," however, is still delayed, and the cloud so long overhanging the market as yet evinces no signs of dispelling. The "favorable indications" and "kindly appearances" of *all* of the mines of the Comstock still form the hopeful theme of our Pacific Coast contemporaries; but no practical ground for this hopefulness has manifested itself yet. We record only one assessment from the Comstock lode this week; but unless our judgment is at fault, the assessment programme is not yet exhausted. There is certainly greater reason for such a belief now than there ever was before. Of the mines of the Comstock, very few are now paying expenses, while the cost of mining at the great depths, which are now rapidly increasing, becomes greater and greater.

SAN FRANCISCO MINING STOCK QUOTATIONS.

Daily Range of Prices for the Week.

Name of Company	Closing Quotations. Aug. 22.	Aug. 23.	Aug. 25.	Aug. 26.	Aug. 27.	Aug. 28.	Opening. Aug. 29.
Alpha	24½	24½	24½	24	25½	25½	25½
Alta	6¾	6¾	6½	6¾	6¾	6¾	6¾
Argenta							
Bechtel	1¼		1¼	1¼	1¼	1¼	1¼
Belcher	4¾	4¾	4⅝	4¾	4¾	4⅝	4⅝
Belle Isle							
Benton							
Best & Bel.	18½	18¾	18¾	18¾	19	19	19¼
BlackHawk							
Bodie	10¾		10¾	11	11	11	11
Booker							
Bullion	6⅞						
Bulwer			8½		8½	8¾	8¾
Caledonia							
California	4⅝	4⅝	4¾	4⅝	4⅞	4¾	4¾
Chollar	6⅝	6⅜	6½	6⅝	7¼	7	7
Confidence		11	11	10	10¾	11	
Con. Imp							1½
Con.Pacific	7		7	7	7	7¼	7¼
Con.Va	4¾	4¾	4⅝	4¾	4¾	4¾	4⅞
Crown P'int	4¼	4¼	4¼	4¼	4	4	4
Endowm'nt							
Eureka Con	16⅝		16¾	16¾	16¾	16¾	
Exchequer	6½	6⅜	6¼	6⅜	6¾	6⅜	6⅜
Goodshaw							
Gould &Cur	11¾	11¾	11½	11⅝	12⅜	12⅛	12⅛
Grand Prize			2⅞	3¾		3¾	
Hale & Nor.	14⅜	14½	14	14⅛	15¾	14¾	14¾
Hamburg							
Homestake							
Hussey							
Indep'd'nce							2⅛
Jackson							
Julia Con	4¼	4¼	4	4¼	4½	4⅜	4⅜
Justice	3⅛	3	3⅛	3⅛	3	3	3
Kentuck	4		4	4⅛	4	4¼	
Kossuth							
Leopard							
Leviathan	¼						
Manhattan							
Mar. White							
McClinton							
MeadowVal							
Mexican	35¾	33¼	33½	33¾	34¾	34	34¼
Mono	8		7¾	7¾	7¼	7¾	7¾
Navajo							
North. Belle			4	4	4	3¾	
Ophir	36¾	36¼	36	36¾	36¾	36¼	36¼
Orig. K'ys'e							
Overman	8½	8¼	6½	8¼	8½	8¾	
P. Sheridan							
Potosi	4¼						5
Ray. & Ely	¾	70c.	¾	¾		65c.	
Richer							
Savage	13⅜	13⅞	13½	13¾	15⅝	16	16
Scorpion	2¼	2½		2⅝	2½	2¾	
Seg.Belcher						24	24
Sierra Nev.	42	41½	40½	40½	42	41¾	41¾
Silver Hill		1⅝	1½	1½	1⅝	1⅝	1⅝
Silver King							
Standard							
Summit							
Tioga	3½		4	3¾	3⅝	3¾	3¾
Tip Top							
Union Con.	55½	52¾	54	56	58	55¾	56
Utah	20	19½	19½	19	19	19	18⅝
Ward							
WashoeCon							
Yel. Jacket	16⅜	15½	15¾	15½	16	16	16⅜

It is rumored in San Francisco that the capital of the Bank of California will be reduced from $5,000,000 to $3,000,000 at the annual meeting in October.

Alpha opens at 25½, against 24, as in our last.

Alta was very steady during the week, opening same as in our last. The mill is running on ore from this mine, but the yield has not been stated.

Argenta is active at 90 cents per share.

Bechtel opens at $1¼. The drifts between the 300 and 400 levels of this mine are being extended south for the purpose of prospecting in that part of this property.

The incline in the Belcher mine is being pushed forward with the object of reaching the 300 level. This stock is selling at $4⅝, as quoted a week ago.

Best & Belcher shows an improvement. The flow of water continues in the new shaft.

We have no quotation of Belle Isle.

In the Belmont, workings are improving, and several new ore-bodies are said to have been found. This stock has sold at 90c. per share.

Black Hawk has been sparingly dealt in at $1.25 per share.

Bodie shows a slight improvement during the last three days, and opened to-day at $11. The mill is running steadily, and bullion shipments are regularly maintained.

Booker is selling in fair amounts at $1.15 per share. Nothing of importance to note of this mine.

Work in the Bullion mine is making fair progress.

Bulwer opens at $8¾, a slight advance from last week. The new mill to be built in connection with the Standard Company, it is said, will be finished in 90 days. No doubt this stock will then show a large advance.

The Bonanzas open at an advance. Cross-cut No. 1, 1950 level, of the Consolidated Virginia mine contin-

ues to penetrate favorable vein formation, showing ore. This company carries over a surplus of $100,000, after paying its dividend of 50c. per share on the 16th inst.

Chollar opens at 7, against 6¾ a week ago. A combination shaft is being rapidly sunk through soft ground.

Consolidated Washoe has been selling at 60c. per share, an improvement on recent quotations.

Consolidated Imperial opens at $1½, against $1⅝, as as in our last.

Defiance has its shaft down 210 feet. This stock shows a lessening in price.

The pumping machinery of the Dudley is put into position. This stock is active in San Francisco at $1 @$1.60 per share.

Eureka Consolidated closed yesterday at $16¾, against $16, as in our last. It is said that an important strike was made in this mine. This stock has improved, quotations being steadily maintained.

Gila, a mine located in Reveille District, Nevada, has come to the front as a bullion producer. This company has a 20-stamp mill, and a vein of ore 2 feet wide.

Active work is going forward in all parts of the Gould & Curry mine. This stock opens at $12⅛, against $11⅝ a week ago.

The ore-stopes of the Grand Prize mine are looking well, and regularly supply the 10-stamp mill. This stock closed at $3¼ yesterday, against $2¼ a week ago.

The cross-cut from shaft, 400 level, of the Independence mine, is 10 inches in width, low-grade ore. This stock opens at $2⅛, against $1⅛, as in our last.

The flow of hot water in the Julia mine continues strong and is getting the best of the pumps. Stock is steady at $4⅜. Ore is opened up in the lateral drifts north and south, west ore chamber, and cross-cut No. 2.

The Leopard Company continues to ship regularly. This mine looks well. This stock is quite active in San Francisco, at a decline in prices. Recent sales were made at 40c.

The Manhattan Company seems to have come to light again. Active work is said to be going forward. This stock is fairly active at $1.75@$3 per share.

Mexican opens at $34¼, and Ophir at $36¼. Mexican shows a decline from last week, and Ophir is unchanged. The joint Ophir winze, 2100 level, of the Mexican mine, has encountered an increased flow of water, which materially interferes with sinking.

Prospects in Ophir are said to be promising. The incline is in excellent formation.

Overman closed yesterday at $8¾, against $8⅞, as in our last. Cross-cutting on the 1600 level, and drifting north to connect with the Belcher 1900 level, is making satisfactory progress.

Most active operations are going forward in the Phœnix mine of Eureka District, Nevada, and prospects are said to be favorable.

The ore-stopes on the Raymond & Ely mine look well, furnishing a good supply of ore. This stock closed at 65c., a decline from the prices in our last.

Water still troubles the Savage mine. This stock opens at $16, decidedly the best price of the week, and an advance from $12⅝, as quoted a week ago.

The main operations in the Sierra Nevada mine are preparing for drainage of the 2200 level. Arrangements are in progress to send the water to the C. & C. shaft, through pipes to the Sutro Tunnel. The heat somewhat interferes with the operations. Stock opens at $41¾, which is a slight advance from our last.

Below we give an official letter from the Standard Mining Company, under a date of August 17th :

"Since last report, there has been no important change in the appearance of the different workings throughout the mine. The north drift, 385-foot level, is in 355 feet; the ledge in the drift is 3 feet wide, of good ore. In the stopes, the ledge is from 10 to 20 feet wide, of very fine ore.

"The winze in the west cross-cut, 550-foot level, is now down 85 feet. The ledge is 5 feet wide, and is looking very well. We have upraised on this ledge 80 feet. There are about 6 feet of good ore in the raise at present writing.

"The west cross-cut, 300-foot level, is now in a distance of 40 feet, in good blasting rock.

"The West Standard ledge in the stopes is looking about the same as at last report. The ore is 10 feet wide, and is as rich as usual. In the south drift, 550-foot level, the stopes are looking particularly well; the ledge is 12 feet wide of very good ore.

"The ledge in the Gildea stopes is 3½ feet wide, of good milling ore. The work on pumping machinery at the new shaft is making good progress.

"Every thing in and around the mine is working well."

Tip Top is sparingly dealt in at 95c. per share. This company's mill is running on ore from the Black Warrior and Silver Prince mines.

Union Consolidated opens at $56, against $49½, a week ago. Our special correspondence gives the latest news.

Water interferes with the operations in the Utah mine. This stock is fairly maintained, and shows a slight decline from the opening prices of last week.

The *Commercial Herald* of August 22d says of the market :

"During the past week, a slight spurt took place in the mining-stock market, the north-end mines on the Comstock lode being in larger demand at advanced rates, and which were given out at this rate in increased quantities, thereby causing prices to recede considerably at the close. It is reported that ore-bodies have been reached in the Union Consolidated, but the rise and then the depression following so soon upon this announcement is not a good indication of the usual course of stocks in this respect. We must have something of a decidedly positive nature to move stocks in large blocks, as was formerly the case; and until the time arrives to show up only 'one' bonanza—let alone 'three,' as positively asserted by Coll Deane—we must look for a variable realizing market of temporary advances and depressions."

NEW INCORPORATIONS.

We note the recent organization of the following companies in addition to those announced in our issue of July 26th, 1879 :

Silver Moon Mining Co	Ariz	$1,000,000
Buena Vista Land Mining Co	Cal	100,000
Buena Vista Quartz Mining Co	"	240,000
Bodie Bluff Con. Gold Mining Co	"	10,000,000
Escondeda Gold Mining Co	"	1,000,000
Isabella Con. Gold and Silver Mining Co.	"	10,000,000
Lady Emma Mining Co	"	3,000,000
Metallic Con. Gold and Silver Mining Co.	"	10,000,000
Sandford Con. Mining Co	"	10,000,000
South Noonday Mining Co	"	10,000,000
Standard Con. Mining Co	"	10,000,600
Tribute Mining Co	"	60,000
Wisconsin Gold Mining Co	"	2,500,000
Argent Mining Co	Colo	2,000,000
Boulder Con. Gold and Silver Mining Co.	"	2,000,000
Central City Silver Co	"	.....
Dry Placer Amalgamating Co	"	3,000
Dunderberg Mining Co	"	1,500,000
Fryer Hill Mining Co	"	250,000
Fryer Mining and Smelting Co	"	100,000
Galveston & Colorado Prospecting Co	"	500,000
Golden Age Mining Co	"	300,000
Herman Mining Co	"	.....
Iowa Mining Co	"	1,200,000
La Plata Mining and Smelting Co	"	2,000,000
Leadville National Mining and Mill'g Co.	"	1,000,000
Lady Franklin Mining and Mill'g Co	"	1,300,000
Second Dry Placer Amalgamating Co	"	3,000
Silver Cliff Mining Co	"	1,000,000
Stockman Gold Mining Co	"	100,000
Garden City Hydraulic Mining Co	Dak	18,000
Auraria Gold Mining Co	Ga	.....
Big Prize Mining Co	Nev	10,000,000
East Bonanza Gold and Silver Mining Co.	"	15,000,000
Eureka Gold and Silver Mining Co	"	5,000,000
Fortune Silver Mining Co	"	2,500,000
Raymond & Ely Mining Co*	"	12,000,000
Red Bird Gold and Silver Mining Co	"	1,000,000
Standard Mining Co	"	10,000,000
Van de Water Gold and Silver Mining Co	"	2,000,000
Rappahannock Gold Mining Co	Va	250,000
Homestake Mining Co	Utah	500,000
Jones Bonanza Mining Co	"	2,500,000
Mackey & Revolution Mining Co	"	10,000,000

*Increased capital stock.

Gas Stocks.

NEW YORK, Friday Evening, August 29, 1879.

Gas stocks are dull and unchanged. No transactions are reported, privately or otherwise.

Reduction in the Price of Gas at Gloucester, Mass.—The Gloucester City Gas-Light Company has reduced the price of gas from $3.15 per thousand feet to $2.65, less 5 per cent for cash. Fifteen hundred or two thousand feet of additional pipe will be laid this fall.

The Manhattan and the Mutual Gas-Light Companies, of this city, are out again with advertisements in the public press announcing a reduction in prices, and both claiming to make gas superior to the other. In the mean time, the public are reaping the benefit in the lower prices, and probably an improvement in the quality of the gas, for the present, at least.

London Gas.—The quantity of illuminating gas consumed in Loudon, per head of the population, is rapidly increasing. In 1869, the quantity burned was 9,885,857,000 cubic feet for a population of 3,158,671, or at the rate of a little more than 3000 cubic feet per head. Last year, the quantity used was 16,293,528,000 cubic feet, or at the rate of more than 4500 cubic feet per head, the population in the middle of 1878 being 3,577,304. In nine years, the ratio has thus risen about 50 per cent. The London gas companies use 4700 tons of coal a day. Their capital in 1869 was £7,828,844; and last year it was $12,232,514.

AUCTION SALES.

Boston Gas Co., 2 shares at	$780
Charlestown (Mass.) Gas Co., 10 shares at	72¼
Dorchester (Mass.) Gas Co., 5 shares at	83
South Boston (Mass.) Gas Co., 10 shares at	101⅛

DIVIDENDS.

OFFICE OF THE EXCELSIOR WATER AND MINING COMPANY.

No. 31 BROAD STREET,
NEW YORK, August 26, 1879.

DIVIDEND NO. 18.

The Excelsior Water and Mining Company will pay a dividend of TWENTY-FIVE CENTS per share, at the office of WELLS, FARGO & CO., No. 65 Broadway, on September 5th. Transfer-books close on 30th inst.

H. B. PARSONS, Assistant Secretary.

OFFICE OF THE GREAT EASTERN GOLD MINING COMPANY,

No. 31 BROAD STREET,
NEW YORK, August 27, 1879.

The Trustees of this company have this day declared a DIVIDEND of ONE PER CENT upon the capital stock, payable on and after September 15th, at the office of the company.

Transfer-books close on the 5th and reopen on the 17th proximo.

SILAS C. HAY, Secretary.

OFFICE OF THE ROCKER SILVER MINING COMPANY,

33 BROAD STREET,
NEW YORK, August 21, 1879.

The company offers 5000 shares for subscription at their office. The reports from the mine are good and the work progressing rapidly.

Prospectus and any information desired can be had upon application at the office.

Rappahannock Gold Mining Company,

Of Virginia.

OFFICE, 60 BROADWAY. CAPITAL STOCK, $250.000.

250,000 Shares, Par Value, $1. Treasury Owns 100,000 Shares.

Incorporated under New York State Laws, and Non-Assessable.

PROF. J. E. CLAYTON, one of the most eminent Geologists and Mining Engineers in this country, recently made a thorough examination of this company's property, and in his report to the Securities Committee of the New York Mining Stock Exchange on the 10th of July, 1879, says :

"In this mine is a large supply of gold-bearing quartz equal in richness to the world-renowned 'Black Hills,' or the average value per ton of the gold mines of California and Australia. There is $60,000, NET, of free-milling ore in sight."

HON. GEORGE W. EMERY, GOVERNOR OF UTAH, in a letter dated May 7th, 1879, expresses his opinion as to the value of Prof. Clayton's judgment on mines as follows : "I have formed my opinion more from what I have heard Prof. Clayton say about it (the —— Mine) than from any information or knowledge of my own. I regard Prof. Clayton the prince of experts, and a man on whose judgment I more fully rely than on that of any other living man in matters of that kind."

DR. HERMAN CREDNER, now Professor in the Royal Saxon Geological School at Leipzig, Germany, and one of the most eminent authorities extant, in a report upon this mine, made in 1865, and after **over $190,000** had been extracted therefrom by the imperfect appliances of those days, says :

"I predict for this mine great success under skillful and economical management."

Dr. Credner says, with reference to the previous operations of this mine, "For an average outlay of $25 in wages, the minimum yield was 13 ounces in gold, but ofttimes it was 16 ounces for the wages outlay noted."

DR. R. W. RAYMOND, U. S. Commissioner of Mining Statistics for eight years, indorses Dr. Credner very highly, and in referring to the above report, recently, says *that "he was perfectly competent and perfectly honest, and his estimates of cost and profits are undoubtedly careful and conscientious."* Dr. Raymond further observes, in his remarks upon the above report : "*When the mining industry of Virginia shall have been reorganized on a more rational plan, we believe it will enter upon a new era of growth and prosperity.*"

Subscription books were opened on July 30th for 50,000 shares of the above stock (out of the 100,000 shares in the Treasury) at 25c. per share, the proceeds to be devoted to the immediate purchase and erection of a first-class stamp-mill; over 25,000 shares have thus far been taken. There are three parallel veins on the property, which show an aggregate length of 15,000 feet of ore, averaging 2 feet thick. The company already has 8 buildings on property, including mill-house, shaft-house, and miners' dwellings. The Company owns also 40 acres of mineral land in fee simple, and the perpetual mineral right in 300 acres adjoining.

There are four years' dividends, of two per cent per month, on the present subscription price of the stock IN SIGHT.

Applications for the remainder of the first allotmen and for prospectus, etc., may be made to

JOHN A. MACPHERSON, Secretary.

FINANCIAL.

VAN DEVENTER & PATTON,
Successors to LUDLOW PATTON & Co.,
Bankers and Brokers,
NO. 6 WALL STREET, NEW YORK.

C. H. VAN DEVENTER. WILLIAM LUDLOW PATTON.

Stocks, Bonds, Gold and Government Securities Bought and Sold on Commission. Loans negotiated. Interest allowed on deposits. Dividends and Interest Warrants collected and remitted.

W. W. HANLY & CO., BANKERS AND BROKERS, 60 Broadway, New York,
Buy and sell mining stocks on commission on New York Mining Stock Exchange, and offer superior facilities on San Francisco Exchanges through agency of the Bank of California.

B. B. MINOR. J. M. HARPER.
MINOR & HARPER,
DEALERS AND BROKERS IN
MINING SHARES AND MINING PROPERTIES
Special attention given to the Stocks of the BODIE AND BLACK HILLS DISTRICTS.
Office, No. 43 Exchange Place, New York.
Care Dickinson Bros., Bankers.
Circulars sent on application, showing operation in Bodie and Black Hill Stocks.

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Dealing exclusively in
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